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ABSTRACT

The objective of the study was to determine the feasibility of implementing a national voluntary system of certification of allied health personnel; specifically addressed were questions of the soundness of the concept, the readiness of the various professional groups to accept such a concept, the functions and responsibilities which would be assigned to such a system, and the expected costs of developing such a system and sources for providing necessary resources. A structured, intensive analysis of the data obtained in a series of in-depth interviews with key individuals in professional associations and registry groups, and others with a potential interest, focused on organizational factors and certification practices to clarify the potential values and problems of a national system; possible alternative approaches were defined, and a series of feedback seminars held. The major conclusion is that a system, national in scope and based on voluntary collaboration of certifying bodies, is feasible. Four acceptable alternatives exist among the various courses open to the Department of Health, Education, and Welfare. To implement the recommendations made by the study, governmental support of a small interim secretariat is suggested. (AJ)

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FEASIBILITY STUDY OF A VOLUNTARY NATIONAL CERTIFICATION SYSTEM FOR ALLIED HEALTH PERSONNEL

(Final Report)

PARTS I and II

by

Eldon E. Sweezy
Project Director

Edward D. Hollander
Harriet M. Kriesberg
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Clement S. Conkey, Jr.

THE INSTITUTE OF PUBLIC ADMINISTRATION
and
ROBERT R. NATHAN ASSOCIATES

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DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20201

The certification of health personnel in the United States has traditionally been the responsibility of the individual organizations that represent the professional interests of the various occupations. However, the standards and requirements for this professional recognition have developed within each group without regard or need to coordinate with other groups. In recent years, the changing demands for skills in the health services delivery system have provided a focus for the inefficiencies and inadequacies of credentialing processes, of which certification is a significant part. It is appropriate that the Federal Government should seek to find out if the certification of health personnel can be more effectively organized to serve national need for competent manpower.

This report is the culmination of a study to determine the feasibility of a national certification system. The study was mandated as a Departmental action step in the 1971 Secretary's Report on Licensure and Related Health Personnel Credentialing.

The conclusion reached by the Institute of Public Administration study team is that a national certification system is feasible. The Summary of Findings and Recommendations are presented here for the professional public whose concerns about certification of health personnel require that they carefully consider them.

The implementation of a national certification system is primarily dependent on the willingness of the individual organizations involved to commit themselves to continued joint activity. We in the Department of Health, Education, and Welfare look to the concerned organizations for this commitment and stand ready to assist in any way possible.

As an initial step, as is recommended by this study, I propose to call a conference to consider the content of the report and make recommendations for its implementation.

In the meantime I would urge all concerned groups to study the report and carefully consider its implementation.

Sincerely yours,

Charles C Edwards

Charles C. Edwards, M.D.
Assistant Secretary for Health

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PREFACE

It has been almost half a century since Mary Parker Follett posited her "law of the situation" to describe the need for the executive to recognize and respond to the dominant forces in the context in which his problems and their solutions are embedded. As the policy sciences have moved toward operational maturity, analytical tools have been evolving that can encompass some of the complexity of modern social policy issues. The careful, extensive analysis which was required in the project was aided by the heuristic tool of contextual analysis by which we have attempted to reflect each major influence shaping the problem. The project team approached the study with no preconceptions as to the feasibility of a national system for certification. We did not even assume the necessity of certification as a process. Our conclusions have, then, been derived from the analysis of experience of the allied health community as revealed in our interviews, supplemented by relevant information from the literature. Alternatives for solving the problem were also sought and evaluated in this same contextual framework.

The environment established and maintained throughout the study by the Project Officer for the Division of Allied Health Manpower, under whose management we performed our work, was continuously helpful. We were permitted to approach the study with complete independence. Our findings and recommendations could, therefore, be reached with that high degree of objectivity and practicality dictated by the professional standards of our respective organizations.

The project team gratefully acknowledges the assistance it received from the many persons interviewed in the allied health community and related health fields. We particularly express our thanks to William Seldon, consultant to the project, for his incisive views of the allied health field and the problems of credentialing. Special acknowledgement is also made of the assistance of the SASHEP staff in making available for our use much of their basic data. And finally, we recognize the invaluable contribution of the administrative and editorial colleagues who have moved this report to its completion.

Washington, D. C.
March 31, 1974

FEASIBILITY STUDY OF A VOLUNTARY NATIONAL CERTIFICATION SYSTEM FOR ALLIED HEALTH PERSONNEL

(Final Report)

PART I

by

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March 31, 1974

CHAPTER 1

SUMMARY OF FINDINGS AND RECOMMENDATIONS

The study of the feasibility of a national (non-Federal) system for certification of allied health personnel has been completed. The objective of the study has been to determine the feasibility of implementing a national voluntary system of certification. The study has specifically addressed:

1. The soundness of the concept
2. The readiness of the various professional groups to accept such a concept
3. The functions and responsibilities which would be assigned to such a system
4. The expected costs of developing such a system and sources for providing necessary resources.

The study was initiated in the spring of 1973. After a literature search, a series of in-depth interviews were conducted with key individuals in professional associations and registry groups, and other interested groups and individuals who could potentially have an interest in a national certification system. A structured, intensive analysis of the interview data focused on organizational factors and certification practices to clarify the potential values and problems of a national system as envisioned by these individuals. Possible alternative approaches to a certification system were defined. A series of feedback seminars were held to further assist the study team in evaluating the various alternatives identified. After the seminars were completed, the study team further analyzed the findings to develop the recommendations presented in this final report.

The major conclusion is that a system, national in scope and based upon voluntary collaboration of certifying bodies, is feasible. Governmental involvement beyond the creation of a compatible policy environment and operational recognition of the value of certification is not needed to sustain the system.

Certification is a form of credentialing process that serves the public interest. A distinctive role for certification in the credentialing of allied health personnel was clearly identified in the contextual analysis process[1/] applied by the project team. A recognized certification system permits a greater likelihood of requirements for continuing competence as well as a higher degree of occupational, geographic and social mobility, all of which are highly valuable characteristics. These attributes of certification become increasingly significant in the kinds of health care delivery modalities projected for the future.

The growing awareness of a vital public interest and need for public involvement in devising, operating and evaluating health care systems will influence the characteristics of a socially acceptable system for certification. A national voluntary system that is perceived by the public as a combination of individual "guilds" into a "superguild" for the protection of parochial interests cannot hope to gain necessary public support. The national system for certification envisioned in this study would guard against this hazard by formulating criteria and

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[1/] This process is explained in Chapter 2.

standards for certification systems through a process that is visible, explicit and performed with participation of a wide range of parties-at-interest.

Any group undertaking to develop the organizational framework for a national system must recognize that the validity of its actions will derive from performance of a function that is in the public interest -- not in pursuit of narrow self-interest. There are no grounds, in the public interest, for the organization of the system unless the potential constituent certifying and professional groups can recognize, and act consciously to protect, the general public interest.

If a national voluntary system for certification is to be established as a viable element in the health care system of the nation, it will be important that the Secretary of Health, Education and Welfare clearly enunciate policies recognizing certification as a valid credentialing process. Policy support would need to make clear that certification has important public values not offered by accreditation, licensure, institutional licensure, or peer review of performance.

Preservation of the independent, professional character of certification will require freedom from Federal domination or other external organizational control of the system. A national voluntary system with adequate public representation could provide the necessary protection of the public interest. A voluntary system places the responsibility for that protection on the certifying bodies affiliated in the system. The role of DHEW should be to maintain surveillance of the effects upon health manpower supply and performance to confirm that certification is exercised in the public interest by keeping public scrutiny focused upon all forms of credentialing of allied health personnel.

The primary motivations for creating a national system for certification flow from a coupling of a rising awareness of professional responsibility within the allied health occupations and responsiveness to the public's interests in accessible high-quality health care. No strong pressures for formation of such a system were perceived. The certifying bodies studied do not now feel significantly menaced by external forces against which a national system for certification would give added security. Benefits to the organizations participating in such a voluntary system would not be as direct as would accrue were there to be need for immediate protection against some definite threats to the continuation of certifying activity. Nor would there be direct increased economic returns to certified persons that would flow from the creation of the national system.

A constituency was developed, during the study, for the idea of a national system. The idea did not attract the vigor and scope of advocacy that would assure independent capability to create the system and sustain it through its infancy. Some external aid from government and the health care community can give the needed impetus to the concept and nurture it during the critical period. However, these sources of assistance must recognize that they would play a circumscribed role. The voluntary, non-Federal nature of the proposed national system precludes external dominance of its structure, activities, and policies.

The possible functions of a national voluntary system were defined through extensive interviews with representatives of allied health personnel certifying bodies and other parties-at-interest. The relative importance of various functions was evaluated through the feedback seminar held with key representatives of the participating organizations. Analysis of these responses identified a set of functions which is relevant to certification and considered by the respondents to be important enough to be proposed as a functional charter for the national system. This set of functions appears below as Table 1.

Table 1. Proposed Functions for National Voluntary System for Certification

Function	Definition
1. Establish standards for certifying bodies............	Determine criteria, standards, policies, and roles for certifying systems that are responsive to the needs of an evolving health care delivery system; and aid in their implementation. Serve as the agent to advise on standards and processes in the establishment and operation of new certifying systems.
2. Conduct research....	Study the methodology of test construction and validation; cost-saving practices in certification procedures; methods for maintaining competence after initial certification; interactions of certification and other forms of credentialing.
3. Collect and disseminate information..	Compile regional and national data on current supply, demand, and salary levels for allied health personnel by occupation, by level within occupation, by location, by type of employment situation. Collect and analyze information regarding new technology, affecting the occupational structure and certification standards for allied health personnel.
4. Provide for mediating, cooperative and joint activities.....	Provide a structure within which the member organizations and other parties-at-interest can review and coordinate initial and continuing certification requirements; mediate differences arising from the need to certify new professions or subspecialties with cross-disciplinary characteristics. Coordinate the development of joint examination programs.
5. Perform public relations and representation role..............	Serve as a common communications arm to the various legislative and administrative government agencies which have an effect upon certification. Among the pertinent issues which are included in such a function are: (a) image creation for the public, showing

Table 1. (continued)

Function	Definition
	allied health personnel as being worthy of the public's confidence; (b) representation of allied health manpower in consideration of the public issues; (c) recognition of the public interests in allied health competence, as reflected in certification, and translation into policy guidance for constituent members.

Performance of these functions would require a stable, responsible organizational structure capable of acquiring and applying the fiscal and manpower resources needed. Further, the organization must be capable of obtaining and holding the voluntary compliance of its constituent members to its standards and policies.

Interviews developed general perceptions of constraints on organizational design. The most workable organizational concept consistent with these constraints was that of a Council of Certifying Organizations. This concept was presented in the feedback seminars as the primary vehicle for assessing organizational alternatives. The available options for detailed structural design were also described in seminar discussions.

The concept of a Council of Certifying Organizations was an acceptable one to the majority of those participating in the feedback seminars. Preferences among the various organizational design options were highly concentrated; in fact they were nearly unanimous on all major features. The resulting organizational design for the Council is outlined below and in Chapter 6.

In analyzing the discussion, the project team sensed ambivalence about the Council concept. There were some who expressed definite feelings of support, viewing the Council as a device to forestall possible undesirable alternatives. Among others, reaction to the Council concept did not reach the level of opposition but rather seemed to represent a reluctance to embrace a highly structured and financially costly concept that was not clearly required by a clear situational imperative.

During the subsequent final analysis phase, an alternate system concept, a Standing Conference on Certification of Allied Health Personnel, was defined. A less formal structure and a more limited set of functions can be embodied in the Standing Conference. The detailed organization design preferences associated with the Council model are equally relevant to the Conference format. Numerous variants of the Conference model can be devised, ranging from a forum for definition and adoption of a set of principles of good practice to a version with extensive research and program activities approaching those proposed for the Council concept. A description of this latter version is presented below and in Chapter 6.

Three strategies are open for the implementation of one of these system concepts:

1. Organize and support the Council of Certifying Organizations
2. Organize and support the Standing Conference of Certifying Organizations as the preferred system concept
3. Organize and support the Standing Conference of Certifying Organizations as a transitional approach to the establishment of the Council of Certifying Organizations.

The choice of strategy will be dictated, at least in part, by the willingness of individual organizations to commit themselves to continued joint activity.

In the judgment of the project team, the strongest structure could be provided by the first strategy. Such a goal is the most demanding of the three. It would require more immediate, firm commitment of purpose and resources by all participants. It offers the most stable structure with the strongest machinery for performing the functions defined above. The problems of resolving power relationships between various parties-at-interest and of providing substantial, stable fiscal support could be more acute than in the other two strategies if not grasped and solved promptly.

The second strategy, attempting to institutionalize a formal Standing Conference, would be the least desirable, for unless the Conference evolved into a Council, in all likelihood it would atrophy and become ineffectual. Explicit initial recognition of the probable evolution of form, at the outset -- the third strategy -- would help avoid resistance to change.

The third strategy is therefore preferable to the second. It recognizes the desirability of the stronger Council form while offering a more flexible approach to organizational relationships during the initial stages. The evolving Conference system concept would make less direct financial demands than the Council form. It would, however, require significantly higher "hidden" payments by demanding of the member organizations a much greater commitment of "volunteer" manpower to perform the many research, planning, and administrative activities. The demands could outweigh the advantages of the strategy if the Conference phase is permitted to persist very long.

The preferred structural characteristics of the Council form of organization were defined during the feedback process. The Council should be incorporated under state laws as a separate, legal entity -- a non-profit corporation independent of any affiliation with any existing association or agency. Its membership should not be confined to certifying bodies alone. Related professional associations, other parties-at-interest in the health care system and representatives of broad public interests in the equity and efficacy of certification should be included within the Council. All members should have an equal voice within the governing general assembly of the Council.

The Council should create a paid staff capacity to carry out its functions. The staff should be managed by an Executive Director acting on behalf of the Council and its Executive Committee.

Although requisites were not discussed during the feedback sessions, an effective Conference model of system organization requires many of the design features of the Council model. The Standing Conference should be incorporated under state law in order to acquire the essential legal authority to contract, hold property, receive grants, etc. It must be an independent entity, unaffiliated with any existing association or agency. There would be only one class of membership in its plenary body --official representatives of the constituent certifying bodies. Other parties-at-interest representing health care and general public concern for certification can be given an advisory or non-voting role.

The Conference would require a small, full-time, paid executive office to coordinate and administer its activities during and between meetings of the Conference. Program and research activities would be performed by working groups designated by the Conference and composed of members provided by the constituent certifying bodies and by other parties-at-interest.

Substantial, assured financial support would be required for either form of organization. The amount required is dictated by the functions actively pursued by the organization. The immediate needs of the Conference model probably would be less than for the Council because greater use would be made of "volunteer" manpower from constituent organizations.

Possible budgets were constructed during the analysis phase to provide a benchmark for economic feasibility of a national system. The estimates for an established system ranged from $70,000 up to $300,000 per year depending upon the size of program staff and the breadth and depth of their program workload. The expense pattern is typical of existing professional and non-profit organizations. No unusual items are needed in the budget. No specific expenditure budget is submitted in this report.

It is clear from the expense budget alternatives that the major influence upon fiscal feasibility is the capacity to generate and maintain stable sources of income. Contextual analysis of interview responses led to a cautious approach in appraising the capacity of various income sources. A time-phased income budget showing the proportion projected from each of four major sources was presented in the feedback sessions (see Chapter 7). It showed the major sources as grants and contracts during the early years, with fees for services to member organizations expanding in later years. Membership fees and endowed income remained a relatively small portion of the support.

This preliminary budget was severely criticized by all seminar groups as too "soft" because of its heavy reliance upon grants and contracts instead of fees and assessments upon the constituents of the system organization. There was substantial support for a financial plan based more heavily upon fees linked to the number of certified persons on record and for each certificate issued. If the opinions expressed during the discussion are truly indicative of possible official action by member certifying bodies there is, indeed, a firm base for income derived directly from certification activity. Based upon 1970 data, the most recent complete year available, the certifying bodies participating in the study would generate an estimated annual income in excess of $40,000 on a fee schedule of 10¢ for each certificate outstanding and $1 for each new certificate issued -- a minimal level assumed to test the viability of this income source. Doubling the 10¢ charge would produce additional income exceeding $20,000.

Sufficiently credible sources of income emerged during the seminars and subsequent analysis to support the conclusion that a national voluntary system would be economically feasible if it received some form of grant support during its formative period of 2 to 3 years.

Action beyond establishing analytically the feasibility of a national voluntary system is required if the concept is to be given substance. The course of events initiated by commissioning of this feasibility study can hardly be concluded until some impetus is given to the realization of the concept. Four acceptable alternatives exist among the various courses open to the Department of Health, Education, and Welfare:

1. Convene an organizing conference of certifying bodies to consider the content of this report and develop a response to its recommendations
2. Convene an invitational work group of representatives of selected certifying bodies to consider the content of this report and develop the organizational structure for initiating the national system
3. By a grant to an appropriate disinterested institution, provide staff support during the detailed planning and organizational phase
4. A combination of either #1 or #2 above with #3.

The most effective option for implementing the recommendations of this study would consist of governmental support of a small interim secretariat to assist in planning, organizing, and conducting an invitational working conference to develop detailed specifications for the organization required for a national voluntary system for certification. The secretariat would cease to function as soon as the organization was formally created and the initial organization and staffing were accomplished.

This action would demonstrate continued public concern and support for the concept of credentialing by certification. By placing the support activities in the hands of a non-governmental institution, the voluntary non-Federal nature of the system to be designed would not be placed in jeopardy. Further, it would permit organizational members of the invitational working conference to concentrate their resources upon programmatic rather than organizational and financial concerns during the start-up phase.

This strategy would do much to assure that all certifying bodies would be able to participate in the fledgling system and organization with greater assurance that the influence of relative size, age, or prestige of the occupation would not dominate the organizational process.

An adequately and independently funded staff secretariat serving the organizing group would be able to aid materially in resolving possible conflicting views between participating organizations. Its contribution of objective analysis of issues and the definition of options for their resolution should increase the likelihood of progress in developing an acceptable structure, organizational objectives and adequate financial support.

We conclude, therefore, with the recommendation that the Secretary of Health, Education, and Welfare initiate implementation of a national voluntary system for certification of allied health personnel.

FEASIBILITY STUDY OF A VOLUNTARY NATIONAL CERTIFICATION SYSTEM FOR ALLIED HEALTH PERSONNEL

(Final Report)

PART II

by

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March 31, 1974

CHAPTER 2
STUDY OBJECTIVES, PLAN AND TECHNICAL APPROACH

In his report to the Congress on health personnel credentialing, in June 1971, the Secretary of Health, Education and Welfare set forth his department's action program. The basis for the study here reported is contained in the following extract from the departmental actions and recommendations:

> 4. Determination of feasibility of national certification. The Assistant Secretary for Health and Scientific Affairs will undertake or initiate the development of a report exploring the feasibility of establishing a national system of certification for those categories of health personnel for which such certification would be appropriate. Should the development of such a system be considered feasible, the report shall include specific recommendations as to the organizational structure and composition of the body that will be assigned overall governing authority for the system. The report shall outline the steps to be taken to achieve most directly the implementation of the plan.
>
> There is a broad consensus that national standards would be useful at this time. The issues involved in designing and operating a system will require

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NOTE: Throughout the report, DHEW definitions of accrediting, certifying, and licensing have been strictly observed:

1. Accreditation -- The process by which an agency or organization evaluates and recognizes an institution or

> close working consultation between the professional groups and the Department. That work should begin at once.

The assessment of feasibility of a national system of certification was initiated under contract with the Institute of Public Administration, aided by Robert R. Nathan Associates. Several important stipulations in the contract terms have focused the resulting study upon the primary policy implications of certification. The contract definition of scope of work contained a series of specific questions to be addressed in the study. These questions have been implicit throughout the data-gathering and analysis. Although they are not explicitly treated in the reporting of findings and recommendations, a conscious effort has been made to ensure that each question has been answered. More precise definition of the central problem in the study made peripheral issues of some of the questions; the majority of these dealt with detailed operational aspects of certification activities.

Three constraints were placed upon the study of feasibility of a national system by the terms of the contract:[1]

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program of study as meeting certain predetermined criteria or standards.

Licensure — The process by which an agency of government grants permission to persons to engage in a given profession or occupation by certifying that those licensed have attained the minimal degree of competency necessary to ensure that the public health, safety, and welfare will be reasonably well protected.

Certification or registration -- The process by which a nongovernmental agency or association grants recognition to an individual who has met certain predetermined qualifications specified by that agency or association. Such qualifications may include: (a) graduation from an accredited or approved program; (b) acceptable performance on a qualifying examination or series of examinations; and/or (c) completion of a given amount of work experience. (U.S. DHEW, Report on Licensure and Related Health Personnel Credentialing, June 1971, DHEW Publication No. (HSM) 72-11, p. 7.)

[1] A proposal for detailed study of the existing allied health certification processes, testing techniques, administration procedures,

1. The system should be a voluntary one.
2. The system should be non-Federal.
3. The project was to be focused upon a stipulated list of occupations and related organizations (See Appendix 2).

Summary of Study Plan and Technical Approach

The problem is typical of the conplexities inherent in solving of problems within the systems that deliver the major social services in our society. These are dynamic problems -- always in the process of solution and rarely removed from the social agenda.

The study was conducted according to the plan shown in Figure 1. The analytical approach followed throughout the project was built around a systematic description and analysis of the situational context of the process of certification.

Contextual Analysis

To provide the necessary framework for describing and analyzing the problem area, the project team used the method of "contextual analysis" which has been pioneered by the Project Director. A three-dimensional

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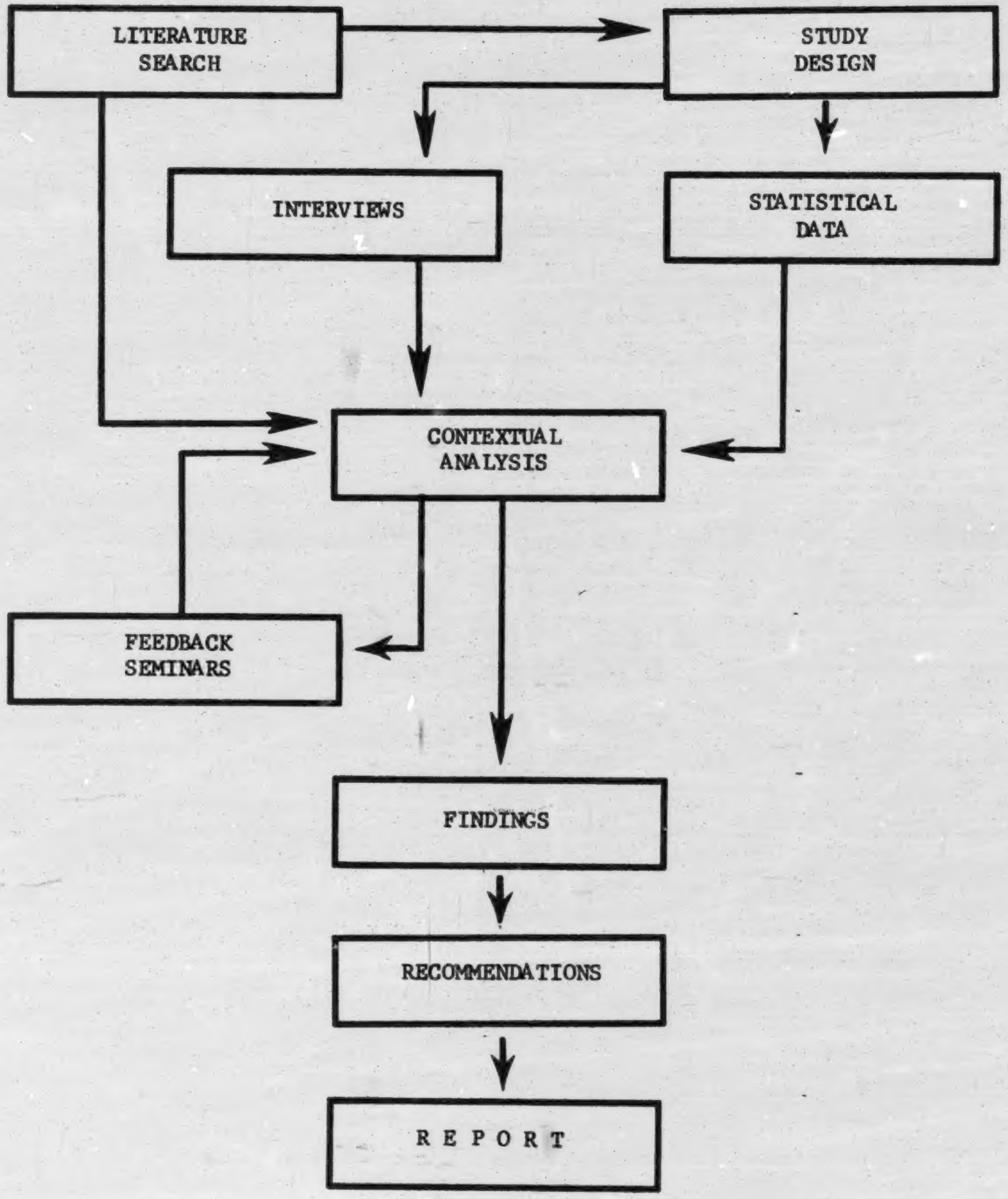
and other operating characteristics has been developed by the Coalition of Independent Professions and the Association of Schools for Allied Health Professions. The study concept was generated in the workshops at the national Conference on Certification in Allied Health Professions in 1971. The project team discussed our objectives and plan with the steering committee for the projected survey. We defined the significant differences in purpose and approach from their proposal. Our initial assessment of the value of that proposal was reinforced as our work progressed. The performance of a definitive study of current practice and the compilation of authoritative quantitative data on the operations of certification systems and the effects upon the health manpower pool is a high-priority target. The proposed organization can give its backing and collaborate in planning and executing the study.

Figure 1
BASIC STUDY PLAN


LITERATURE SEARCH
STUDY DESIGN
INTERVIEWS
STATISTICAL DATA
CONTEXTUAL ANALYSIS
FEEDBACK SEMINARS
FINDINGS
RECOMMENDATIONS
REPORT

matrix, representing the major influences operative in the project, was used as a heuristic device -- a means for learning -- for exploring, in depth, the various influences and their interaction.

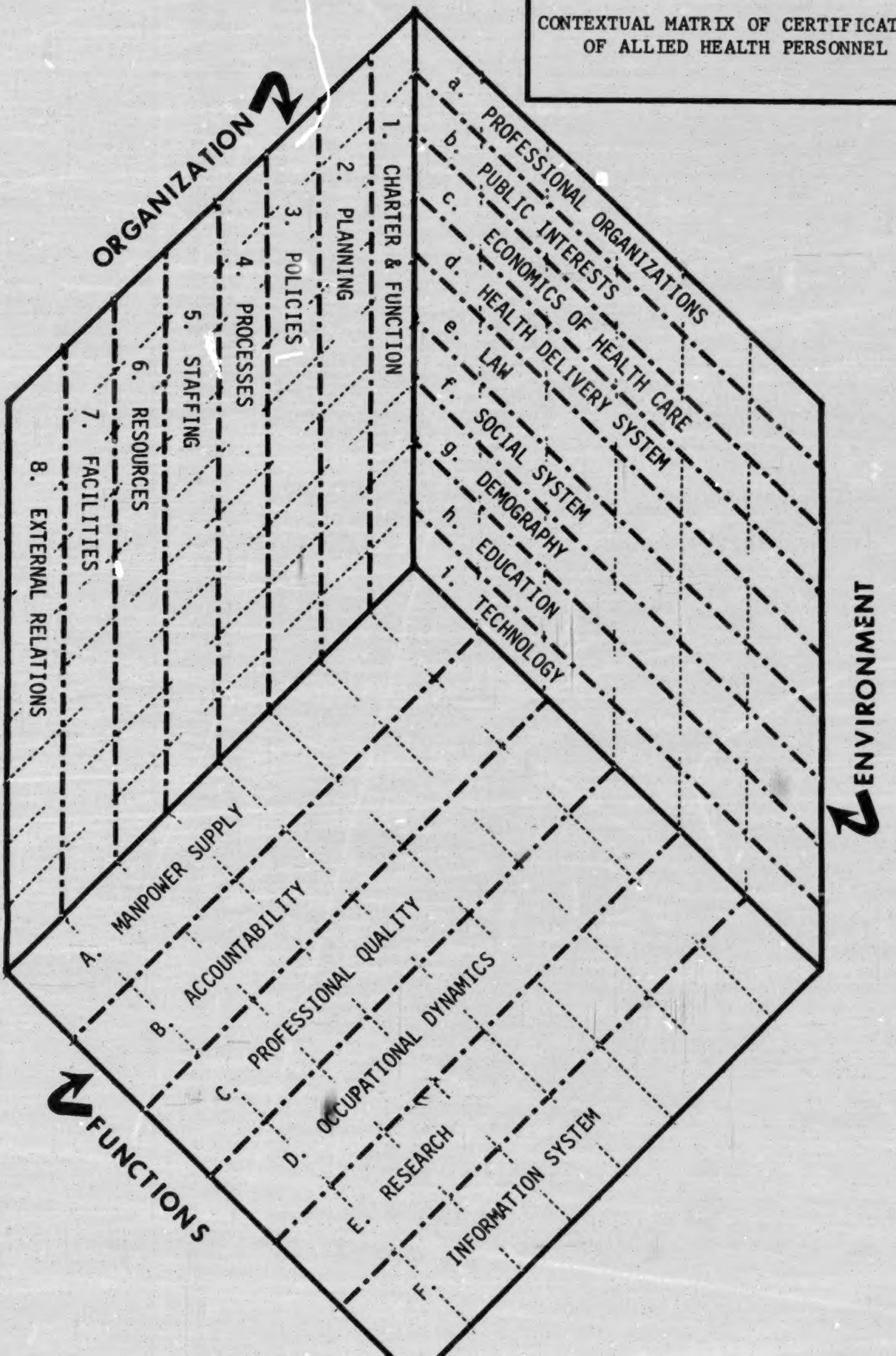
By an iterative process, actually pragmatic in nature, the best solution is sought within the constraints imposed by the present and foreseeable situation. Implementation of that solution combines, in turn, with changes in the surrounding problem environment to modify the situational context of the problem and thus to create the need for and opportunity to initiate a successive set of actions that will move through "better" solutions toward the objective "best" solution.

The contextual analysis matrix is shown in Figure 2. There are three major aspects to the problem, represented by the three axes or sides of the matrix: environment, functions, and organization characteristics. Significant information relevant to each aspect of the matrix is divisible into domains which represent the principal influences. Within the model they interact so that need for and feasibility of a national voluntary system for certification can be assessed. Organization characteristics needed for certification were derived based upon the functions such an organization can most effectively perform within the environmental constraints. The matrix structure provided a framework whereby any useful information, idea, or concept is specifically related to the other significant domains of influence. The matrix served as a checklist to assure the consideration of all of the possible interactions between these significant attributes of the situation.

A detailed definition of each of the domains, currently identifiable on each aspect of the contextual matrix, makes the usefulness of the matrix clear. Although some domains in the initial matrix proved to be relatively less important in reaching final findings, the preliminary model proved to be a sound framework for the data-gathering analysis and evaluation phases of the study. No modifications of the definitions or addition of domains proved necessary. Deletion of some domains was

Figure 2

CONTEXTUAL MATRIX OF CERTIFICATION OF ALLIED HEALTH PERSONNEL


ORGANIZATION
1. CHARTER & FUNCTION
2. PLANNING
3. POLICIES
4. PROCESSES
5. STAFFING
6. RESOURCES
7. FACILITIES
8. EXTERNAL RELATIONS
ENVIRONMENT
a. PROFESSIONAL ORGANIZATIONS
b. PUBLIC INTERESTS
c. ECONOMICS OF HEALTH CARE
d. HEALTH DELIVERY SYSTEM
e. LAW
f. SOCIAL SYSTEM
g. DEMOGRAPHY
h. EDUCATION
i. TECHNOLOGY
FUNCTIONS
A. MANPOWER SUPPLY
B. ACCOUNTABILITY
C. PROFESSIONAL QUALITY
D. OCCUPATIONAL DYNAMICS
E. RESEARCH
F. INFORMATION SYSTEM

possible as the study progressed into the analytical and concept generation phases, but all were retained to continually test their relevance. In particular, the planning, policy, processes, and facilities domains of the organization characteristics aspect proved to be almost entirely relevant to the initial stages of creating the national system organization rather than to the assessment of basic feasibility.

Environment aspect. The classes of influence that exist outside the potential national certification organization and have a significant effect upon the structure and performance of organizations dealing with health personnel certification.

1. Professional organizations -- structure, role, traditions, activities, and interests of professional organizations and groups of health personnel.
2. Public interest -- needs, expectations, and interests of the general public (exclusive of the health personnel).
3. Economics of health care -- structure and behavior of the economic system relevant to the provision of health care.
4. Health delivery system -- structural and behavioral characteristics of the elements of the system for delivery of health care.
5. Law -- statutory and administrative law and related regulations affecting the health care delivery system and its personnel.
6. Social system -- features of the society that represent influences of group attitudes, structure, and tradition, including the non-professional power structure and system of values.
7. Demography -- size and distribution of relevant population.
8. Education -- formal and informal institutions and activities for systematic development and cultivation of the mind and other natural powers as relevant to allied health manpower.
9. Technology -- equipment and techniques by which allied medical personnel perform their professional functions.

Functions aspect. The principal forms of effects that constitute major outputs from the "national system of certification."

1. Manpower supply -- activities that affect the quantity, distribution, and geographic and career mobility of allied health personnel.
2. Accountability -- structure and processes by which legal and ethical standards of performance and sanctions are applied.
3. Professional quality -- standards and processes for assessment and maintenance of the level of professional competence regardless of source.
4. Occupational dynamics -- dynamic adaptation of occupational content and structure to changing employment needs in the health delivery system.
5. Research -- sponsorship and management of investigations and experiments to make certification procedures and policies more effective.
6. Information -- assembly and dissemination of information relevant to certification of allied health personnel.

Organization characteristics. The principal elements of the institutional structure of the national system of certification and its governing body.

1. Charter and function -- formal specification and distribution of functions and authority to and within the organization for the national system of certification.
2. Planning -- process and structure for determining objectives and implementing actions.
3. Policies -- process and structure for establishing and maintaining the guiding framework for management decision within the national system of certification.
4. Processes -- procedures and techniques for operation of the system of certification.

5. Staffing -- type, quantity, and quality of personnel and its distribution within the organization.
6. Resources -- fiscal and manpower resources needed to establish and operate the national system of certification and their acquisition, apportionment, and conservation.
7. Facilities -- buildings, equipment, and other physical assets required to operate the national system of certification.
8. External relations -- formal and informal links and interactions between the national system of certification and other bodies, especially those related to accreditation and licensure.

Using the Matrix

Classification and collation of information gathered during all phases of the project were systematized by use of the matrix. Significant gaps in coverage were then spotlighted and remedied by sharply focused data-gathering. The schedule of interview stimulus questions was constructed to assure that applicable cells and domains in the matrix were given appropriate weight in discussions with key persons in the interview phase. Analysis was greatly expedited by use of the matrix domains as major divisions of effort. Cross-effects were more readily identified because all information could be analyzed from all three aspects of the situational context.

The functional aspect domains focused the analysis upon the certification system's needs for and capacity to influence the allied health personnel characteristics in the delivery system. Analysis in terms of organization characteristics led to specification of alternative forms of organization by which the national system can be structured and managed. By focusing on the environmental domains, the analysis was able to test the feasibility of various functional and structural configurations. For example, possible effects of alternative models of composition of the governing body were readily and objectively tested and compared by use of the environmentally focused analysis. The public and professional accountability facets of professional certification were more fully explored by tracing the effects from the various environment cells in the accountability domain through the adjacent banks of cells along the organization characteristics axis.

Interview Method

Each organization listed in Appendix 2 received letters from the Division of Allied Health Manpower and the Project Director explaining the purpose of the study and requesting their cooperation (Appendix 1b). By telephone, arrangements were made to interview representatives of each organization. From one to four interviews were conducted by team members.

All interviews were conducted by experienced analysts who participated in the design and testing of the interview plan. Uniformity of stimulus questions is vital to the comparability of the data obtained in each interview. A standard interview format was developed to increase comparability.

The basic stimulus material was derived to permit open-ended responses about difficulties and significant influences. Typical situations and problems encountered in operation of certification systems in each occupation were identified by use of the contextual analysis matrix. The respondent was given descriptions of these situations in advance and was asked a set of questions designed to probe deeply into the structure of policy concepts and the constraints that underlie the organization's experience and its response to certification or other aspects of credentialing (Appendix 1a).

Potential contributions to the definition of a feasible system and related organization were sought and carefully described throughout the interviews.

To provide a more open interview situation, verbatim records of interviews were not made. All interviewers prepared summaries of the responses immediately afterward for the project's information bank.

Prior to the initial interviews, all interviewers received a common orientation and practice in the use of the interview guide and preparation of summaries. This achieved a high degree of uniformity in quality of the information collected from respondents in different allied health specializations.

Questionnaire

At the outset of the study it appeared possible that common data would need to be collected from existing credentialing organizations or other professional groups in allied health fields by use of an appropriate questionnaire. The staff of the Study of Accreditation of Selected Health Education Programs (SASHEP) made their extensive questionnaire data available to the IPA/RRNA team. These data and those supplied by official sources enabled us to meet project objectives without initiating additional primary data-gathering activity.

Feedback Seminars

Discussion of study findings and evolving system concepts with professional groups contributing to the study was an important aspect of validating results of analyses and assessing operational feasibility of alternative system designs. Large meetings are not effective for this purpose, because they do not facilitate free participation by all attendees and frequently produce either positive or negative "gro[illegible]d swell" effects that preclude truly objective evaluation of the ideas under consideration.

With the concurrence of the Project Officer, the IPA/RRNA study team arranged small one-day seminar meetings in which major issues were presented for discussion in a round-table format. A free exchange of information, experience and assessment of various options in the system design was focused upon a series of seven seminar working papers which summarized the results of contextual analysis of interview data, statistical data, and information from the relevant literature.

Each organization surveyed during the interview stage was invited to designate a representative to take part in a seminar. One organization declined to participate, and representatives from two others were unable to attend sessions scheduled for them because of illness. Participants were scheduled to give optimum representation of common interests in each seminar, but with sufficient diversity to bring into focus both the common and separate interests of different groups and the effect of a national system on allied health manpower in general. An average of five organizations was included in each of the five seminars. Seminars were scheduled in Oklahoma City, Chicago, and Washington, D.C., to give each allied health group surveyed an opportunity to contribute to this important phase of the study.

Final Analysis and Reporting

An extensive record was made of each seminar. Major content was summarized during the study team's subsequent analysis stage. The contextual analysis matrix was again used in further defining the situational influences upon the need for and the feasibility of systematic coordination of certification. We have organized these results of analysis around the several domains in the environmental aspect (Chapter 3) and the functional aspect (Chapter 4) of the analysis matrix. System characteristics are derived from the subsequent integration of functionally organized findings.

CHAPTER 3
INFLUENCES UPON SYSTEM FOR CERTIFICATION

In assessing the feasibility of the concept of a national, voluntary, non-Federal system the following criteria were defined and applied. The criteria were derived from the interviews and the prior experience of the SASHEP study.[1]

1. A national system

2. A non-exclusive system embracing general and specialist certification and organized and unorganized manpower

3. An open system designed to give both professional and public interests an opportunity to participate effectively in formulating standards for certification systems and supervising the administration of certification systems

4. A fair and equitable system giving proper regard to due process and avoidance of conflicts of interest

5. An independent system free of mandatory control by government or domination by vested institutional or professional interests

6. An efficient system which eliminates unnecessary proliferation and duplication of occupational

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[1] Study of Accreditation of Selected Health Educational Programs, Working Papers, SASHEP, Parts 1 and 2 (Washington, D.C.: National Commission on Accrediting, 1971).

categories and assures consistency in standards of certification and in their application

7. A flexible and adaptive system which can respond to new developments in technology, education, health care delivery, and changing needs of our society

8. A system which recognizes the interdependence of allied health manpower

9. A system based on the performance of a recognizable, workable set of functions serving member and public needs

10. A system limited in objectives to those to which certification can be reasonably expected to contribute as a form of credentialing

11. A demonstrable set of benefits for individual member organizations at tolerable economic and social costs

12. A system that does not threaten the continued independence of constituent members as corporate bodies.

The question of feasibility was approached in two stages: (1) feasibility in principle, including the question of benefits to the professions and the public of establishing such a system; and then (2) feasibility in practice, including ability to finance the operation of the system and achieve the benefits at a reasonable cost.

The principal finding is that a national, voluntary, non-Federal system for certification of allied health personnel is feasible, both in principle and in practice. It offers a potential for definite benefits for the professions and the public. Participants in the feedback seminars reflected positive attitudes toward their ability to work together to implement a system. The prospects for feasibility in practice are favorable enough, therefore, to warrant an attempt to organize such a system.

Possible Role of a National System for Certification

The organization for a national voluntary system for certification would be continually involved in improving public perception of the quality of the allied health personnel and their performance. A national system for certification should focus on policy standards and criteria, and not engage in actual operation of the certification process. Its major interest and activities would be concentrated upon the effects of certification on quality and quantity of health manpower, and thus upon the quality and quantity of health care delivered.

Certification -- A Valuable Credentialing Process

The most important word in the task assigned to our study team is -- "voluntary." Throughout our design of the interviews, the writing of seminar working papers, and the analysis of feedback in the seminars we have given continuous prime attention to the need and ability to have a national voluntary system of certification.

The voluntary criterion is compatible with three important philosophical premises:

1. Certification is a validation of individual capacities and must be consistent with the concepts of individual freedom embodied in our national tradition and law.
2. Egalitarian societies reach their necessary balance and control by successive under-controlling actions rather than the over-controls applied by authoritarian societies. Voluntary action by associated citizens is always preferable to compulsory action -- if the public interest is adequately protected.
3. The classic law of conservation, which holds that the best solution to a problem is that which requires the least force.

K2

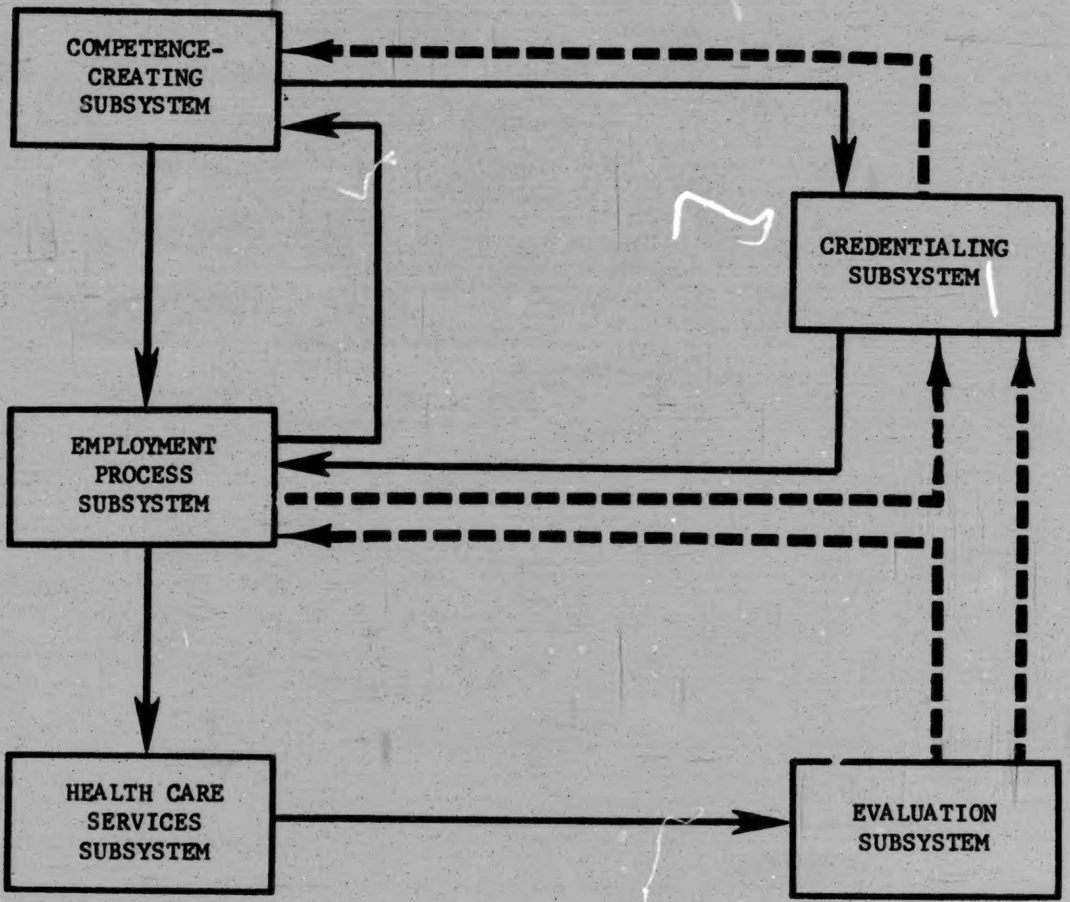
The study has brought out public interest in a certification system to attest to competence of individuals -- predicated on the assumption that certifying bodies will continually recognize and act to preserve the public interest.

Credentialing serves an important role as a feedback control in the creation and utilization of competent health manpower. The general relationships among the primary components of the system are shown in Figure 3. Each of the subsystems depicted contains complex sets of activities and organizations through which the capabilities for performing allied health services are created, employed, evaluated, and strengthened. Competence is created through education in accredited and unaccredited schools, on-the-job training and work experience. Through the employment process, applicants are screened to match their capabilities to the performance requirements of specific work assignments. Employed allied health personnel deliver health care services. Those applicants who fail to meet requirements can return to the competence-creating subsystem to acquire the added or modified capabilities they lacked. These subsystems interact through another link that transmits demand data and performance requirements as guidance for competence-creating activities.

The credentialing subsystem performs the primary function of recognition and validation of various aspects of the competence created. Through accreditation it validates the type, quality, and content of some of the competence-creating activity. By licensure, it validates the possession of a minimum level of competence which has been defined within a state or municipality as necessary to protect the public interest. Certification provides evidence of a level of competence defined by the profession as a national standard for practitioners of the occupation. The criteria and standards applied in the credentialing subsystem are affected by information concerning qualification needs supplied by the employment subsystem.

Figure 3

CREDENTIALING AS FEEDBACK CONTROL IN HEALTH MANPOWER


COMPETENCE-CREATING SUBSYSTEM
CREDENTIALING SUBSYSTEM
EMPLOYMENT PROCESS SUBSYSTEM
HEALTH CARE SERVICES SUBSYSTEM
EVALUATION SUBSYSTEM

Health care services are evaluated by a variety of mechanisms, including immediate supervision, patient response, peer review, accrediting, which perform some of the functions of an evaluation subsystem. If added manpower, modified job knowledge and skill, or new capabilities are required, this guidance flows to the employment and credentialing subsystems to modify, in turn, the quantity, substantive content and quality of competence produced and credentialed.

Certification is a privately performed credentialing process for skilled personnel which serves a definite public purpose. No other form of credentialing has equal capacity to give evidence of personnel competence to perform functions for which the general public has no effective basis of independent validation of capability. Reliance upon educational records confuses evidence of scholastic performance with job skill. Scholastic credentials attest to performance of a number of separate units of education, but they are not necessarily evidence of an integrated mastery of a complex set of knowledges and skills. Although schools for allied health personnel typically require clinical practice in some fields, the diploma or degree becomes recognizable and meaningful evidence of competence only when it represents ability to perform the constellation of skills integrated in performance in a specific allied health occupation. The educational credential progressively loses its relevance as time elapses after graduation. It does not match certification in capability to attest to the maintenance of continuing competence after completion of formal accredited educational programs.

Licensure, the third major form of credentialing, is limited in value by two characteristics. First, the license granted defines a minimum level of competence rather than the highest level of competence possessed by the person licensed. Additional credentials are required in order to fully assess the performance potential of an applicant for employment. Second, licensure has been adopted in some occupations as a vehicle for restricting entry mobility into a state to protect the economic interests of licensed resident practitioners. This restricting effect will be discussed more fully in a subsequent section dealing with labor mobility. Certification systems, in contrast, are capable of showing both the breadth and depth of competence that differs from the minimum levels established by a state as requirements for licensing. Further, they are capable of doing so without geographic limitations.

If certification is to have any public meaning, all "certifiers" and "certifieds" have a valid reason for preventing anyone from offering certification that does not come up to the standards of their own certifications. In other words, Gresham's Law would be a reasonable analog from the field of economics. Bad certificates will degrade all certificates by destroying public confidence and acceptance of the value of certification as a process. It is for this reason that the academic community has so strenuously fought to eliminate "degree-mill" organizations which issue academic credentials of low value. If degrees are not all good, then eventually all can become bad.

Creating an image of a "certified person is a competent person" can be viewed as an exclusionary, self-serving action if performed by a single group. But this desirable internal control can be fostered organizationally. There would be less risk that certification will be viewed as self-serving than would be the case if the certification control were exercised independently by each occupational group. Certification can come dangerously close to exclusion -- unless the public interest is clearly understood. Public interest in certification requires four characteristics: (1) open entry into the field, (2) a sufficient manpower supply, (3) competent practitioners, and (4) no constraints upon development of increasingly effective health care delivery systems. If these conditions are met, then the public interest in the "exclusionary" characteristic of certification has been satisfied and the public interest has been protected.

Diversity of Certifying Systems

It is important to recognize the essential diversity in form among the several occupations and professional organizations performing valid certification. Criteria for approval of a certifying system should not interfere with variations in form, which can be acceptable as long as "professional quality" and the quality of standards of certification are within the range of the acceptable standards.

Throughout this study, we have assumed that all current certification systems studied are valid under existing conditions. We have concentrated, however, on the future character of certification and the growth, development and improvement of current and potential systems.

The national system organization, when created, would be confronted with two classes of situations involving certification systems:

1. Now certifying: Some existing certification systems will conform to or exceed all of the standards established. The National System's role could be to assist in maintaining the high quality of such systems. Other organizations may meet the standards but not exceed them. The National System could assist these individual systems in maintaining their present levels while improving their performance significantly by adopting improved ways for increasing the effectiveness and efficiency of the system methods or organizational practices. In dealing with existing certifying systems which do not conform, in all respects, to the standards, the National System's role could be to provide technical assistance to the certifying body to improve its practices sufficiently to meet the criteria established. There would be a definite emphasis upon constructive assistance.

2. New occupations not now certifying: As new occupations achieve an identity and desire to establish some form of professional credential,

the national organization could provide information and assist them to design and activate a certifying system that meets the criteria. It could, perhaps, assist in negotiating arrangements to meet new certifying needs within another existing certifying system through the establishment of specialty designations, or by clarifying occupational definitions. Or, administrative arrangements could be made for the sharing of facilities or staff without actual merging of the certifying policies and criteria.

The conduct of research and the development of means of general improvement of the certification process would be implicit in both classes without regard to whether individual participating organizations are below, at, or above the standard level.

Relation to the Social System

Analysis of the certification process in relation to the social contextual environment brought to light several significant influences upon the ultimate feasibility of the national system. Among these are:

1. The importance of labor mobility
2. The thrust to achieve professional identification of allied health occupations
3. The process of role definition in the field of health manpower
4. The premises upon which cooperative behavior can be built
5. The concern for role conflict between occupations and their organized spokesmen.

Labor Mobility

Geographic and organizational mobility of allied health personnel creates an additional reason for the establishment of nationally recognized credentials. Movement from one locale to another for personal preference or labor market efficiency, essential in a free labor market, is restricted when prospective employers have no readily available means for establishing the type and level of occupational competence.

State licensure does not offer a satisfactory substitute since it can interfere to a significant degree with the free mobility of qualified personnel from one state to another. The rigidity of licensure can impair the ability of the labor market to meet the changing demands of the health care delivery system. In spite of reciprocity agreements between some states, the lack of uniformity in licensing requirements and the ever-present possibility of uncoordinated changes between states create a tenuous basis for the acceptance of the licensure mode of credentialing as conducive to a free, open labor market.

The normal employment process can mediate the relationship between qualifications held and requirements of positions; and between qualifications, duties, and pay. A national certification system will make more uniform and credible information available to a prospective employer. Without nationally acceptable credentialing, information regarding qualifications would be developed and verified only by diligent and costly inquiry.

Development of Professional Identification

It is our conclusion that there is currently a strong trend toward professional identification in the allied health occupations. A major objective of increasing the professional character of their occupation was expressed by all the professional organizations with whom we have been dealing. There is a continuing conscious effort to develop and use the characteristics of a profession.

An accepted definition of a profession establishes three primary attributes: "Any profession exhibits at least three characteristics. It rests on a systematic body of knowledge of substantial intellectual content, and on the acquisition of skills for application of this knowledge to specific cases. It has standards of professional conduct that override goals of personal gain. It has instruments for the enforcement of standards and the advancement of knowledge."[1/]

As the health care delivery system becomes a more complex and pervasive social process, there is greater and greater need for internal means for constructive guidance and discipline of practice. These means must function in the context of an open elite -- a major premise in our social system. The certification system, therefore, should not be permitted to operate in a way that forecloses any part of our society from entry into an occupation.

The expansion of the technical arts underlying an occupation may broaden its set of functions and thus enhance the relative position of the occupation in the total spectrum of health manpower. Such changes can cause overlaps among occupations already firmly established or in the process of evolution. There is, thus, a role for the national certifying system organization to coordinate the identification of discrete allied health occupations and specialties.

The attainment of professional identity is impeded by the lack of a necessary systematic body of knowledge which characterizes professional fields. Development of discrete curricula for education for an occupational field and oriented research advancing the art are two of the avenues for evolving and systematizing the knowledge specific to an

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[1/] Official Register of Princeton University, 1972-1973, Princeton, N.J.: Princeton University, p. 10.

occupation. Both of these paths increasingly are being used for allied health personnel.

Certification is an internal control on quality exercised by the group. When it operates as a control on quality, certification exercises a desirable social influence. There is a public interest inherent in the health occupations. The public needs some means to protect the health care delivery system from the intrusion of incompetents. When performed by the state, this protective measure is licensure. Professional groups can offer protection by the process of certification.

Acceptance of the social desirability of the drive for professional identification does not mean an endorsement of three negative effects identified during the analysis. First, there is a tendency to overqualify. Qualification standards for certification can be increased far beyond the levels really required for effective job performance. The disparity between these high levels of knowledge and skill and the lower levels actually utilized in normal employment contribute to lowered morale and lowered job satisfaction with attendant problems in managing the health care delivery system. Further, the unnecessarily high standards can create greater income expectations with resultant upward pressure upon costs of health care.

Overqualification for certification can also operate to deny significant segments of our society access to a certified occupation. Excessive educational requirements are the most common type of qualification that can be discriminatory in this way against socially and economically disadvantaged segments of our society. Educational upgrading is not intrinsically a desirable trend in an occupational field. Increased educational requirements must be directly related to changes in the technological nature of the work, the type of working relationships normally encountered, and the relation of the occupation to the status structure of the host society.

The third potentially undesirable effect would be the growth of an attitude among the "professional" groups that they have been somehow endowed with a higher status in the social system. The assumption of a mystique or aura of this sort can be destructive of good working relations within the health care system. The real needs of individuals to achieve self-esteem and self-actualization can be met if a certification system emphasizes progressive growth of a person's command of a real body of special knowledge, skill, or art and gears this recognition to career development and mobility.

Cooperative Behavior and Role Conflict

An essential element in any feasible organization for a national system for certification will be the ability of the individual member organizations to establish and sustain a cooperative relationship with the other organizations involved. In this connection it is well to identify and apply the four conditions necessary and sufficient for cooperation.

1. The people or organizations must be self-respecting in a self-respecting situation.
2. There must be mutually recognized and accepted objectives.
3. There must be mutually recognized and available means of resolving conflicts.
4. There must be mutual acceptance of responsibility for the results of common activity.

Implicit in these conditions is the requirement that the individual organizations must recognize benefits which they can achieve from joint action and the costs to them of engaging in that action. The costs and benefits can be economic; they can be psychic; they can be social in terms of power and they can be an increased or decreased possibility of achieving goals. There are ideas, objectives, goals, concepts, and values that are so closely identified with an organization that the preservation or achievement of them becomes a major consideration for that organization.

Despite the importance of cooperation it is possible for there to be collaboration between organizations without all of the conditions for cooperation being met. Such a condition exists when there is no mutuality of objectives but there is room for a pooling of resources to achieve separate, non-conflicting goals.

Role conflict is a significant factor in the ultimate feasibility of a national system. If the conditions for cooperation outlined above are to be met within the system, there must be some means for resolving the roles of various occupations and their spokesmen organizations with enough clarity to avoid challenge to feelings of self-respect, creation of conflicting objectives, or the provision of shelters from accountability for joint action (i.e., opportunities for "scape-goating").

Role definition is not a terminable process. It will continue. The national system should not, therefore, impede role resolution. Neither should it be oriented, on the other hand, primarily to the definition of roles. Its policies and structure should recognize the inevitability and desirability of the role-definition process and should provide an amicable forum in which an integration of differences can be achieved.

Economics of Health Care

The past two decades have witnessed a revolution in the economics of health care. The end of these changes is not yet in sight. Under the influence of rising incomes and rising prices, personal expenditures for health care services have increased about fourfold since 1952. Even excluding the effect of price changes, American consumers bought more than twice as much health care in 1972 as in 1952. As a proportion of total consumers' expenditures, health care rose from less than 5 percent to 8 percent.

American consumers have shown a persistent tendency to increase their expenditures for health care services as their incomes increase. In other words, there appears to be a latent demand for health care that remains partly unsatisfied at lower income levels and is translated into expenditures (effective demand) as income rises. Thus, the marked increase in incomes in the past 20 years has brought about a rapid increase in the demand and expenditures for health services. Demand for health services has also been expanded by direct governmental expenditures, including purchases on behalf of welfare recipients, primarily through Medicaid, and increased numbers of other recipients under other Federal, state, and local programs. Public expenditures for health increased from $4 billion to about $25 billion in 20 years.

Another major cause of the rise in expenditures has been the increase in prices of health care services of all kinds. Hospital costs have risen as hospital workers -- long among the lowest paid in the economy -- have been able to raise their wages, beginning with the lowest paid categories and spreading to technicians, nurses, and house physicians. Rising demand based on rising incomes has "validated" these cost increases in higher hospital rates.

Increased educational requirements for qualification of allied health personnel, as well as physicians, dentists, nurses, etc., have contributed to the rising pay for health personnel through two primary mechanisms. First, the additional cost of educational preparation for employment represents a higher investment and opportunity cost which must be amortized over the useful period of employment. Second, the higher level of education and training causes a concomitantly higher level of expectation on the part of the persons receiving the education or training, based on their perception of their own income and status compared to those perceived for other persons of the same educational-occupational-age characteristics. These perceptions are translated into pressure to achieve equality, which raises the asking price for manpower in health services. Educational and training requirements in excess of those actually needed for competent performance of assigned functions can increase costs without a compensating increase in quality or quantity of health care delivered. The public interest in certification, therefore, includes an interest in credentials reasonably related to actual occupational performance requirements.

The higher price of health care also reflects the steady spread of various modes of health insurance -- Blue Cross, Blue Shield, commercial insurance, Medicare, and Medicaid -- until now most of the population is covered in one way or another for part of health and hospital expenses. Economic analysis of behavior of charges for health care has demonstrated convincingly that insurance coverage is an important element in the causation of price increases.[1] When consumers are insulated by insurance arrangements from the cost of services they use, and when physicians and hospitals are insulated from the effects of cost on their patients, the usual constraints on the quantity and price of services purchased are apparently weakened. Paying less than "market" prices, consumers tend to use more than if they had to pay directly the full price -- though not necessarily more than they need. And at the same time, physicians and hospitals may charge more than they otherwise would, knowing that individual patients do not have to pay the full charge. Thus, demand and price both may be increased by health insurance. This is significant in view of the continued spread of insurance coverage, and particularly in prospect of some sort of national health insurance in the next 5 years.

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[1] Robert R. Nathan Associates, Inc., A Report on the Results of the Study of Methods of Reimbursement for Physicians' Services Under Medicare, prepared for Health Insurance Benefits Advisory Council, Social Security Administration, HEW, Washington, D.C., July 1973, Appendix A, pp. 7-9.

These demand-supply-price relationships grow out of the financial arrangements predominant in the "market" for health services in the United States, known as "fee-for-service," meaning that physicians', dentists', and hospital charges (whether insured or not) are based on the particular services rendered to the individual patient by the specific provider. This method of payment is characteristic of the prevailing system for delivery of health care, under which the patient chooses (or is referred to) an individual physician, dentist or hospital and is charged accordingly. Thus, practitioners and hospitals, as vendors, set charges in response to market costs and prices. If demand and costs increase, vendors are free to respond like vendors of other services priced in the market. Consequently, fee-for-service health care is generally responsive to market influences.

Alternative systems of payment are possible. One which the government encourages, is "prepaid group" arrangements (also called health maintenance organizations -- HMO's) under which a group of general and specialist practitioners and allied health personnel contracts to provide health services to a group of enrolled patients, all of whom pay periodic premiums which entitle them to receive such health care as they need, with nominal charges or none at all for specific services as provided. The emphasis is on therapeutic and preventive care to keep enrollees healthy, as efficiently as possible. Other alternative forms, used in other countries, include "capitation," by which physicians undertake to provide for a roster or panel of patients at a set fee per capita; and "state" medicine, by which government-salaried doctors treat patients on demand, at no charge.

What these systems have in common that distinguishes them from the delivery and financing of health care prevalent in the United States is that the delivery of service is organized by voluntary or legislative action rather than by the "market" forces, and that the particular health service is not linked to a corresponding fee (by whomever paid). In consequence, financial incentives of both the patient, to restrict his use of medical services, and the provider, to maximize his income, are weakened. Depending on the specific modes of reimbursing providers and controlling the quality of health care, the weakening of incentives may increase or decrease efficiency of delivery systems and cause higher or lower utilization of health care resources.

Given the level of need for health services in a population, "efficiency" of a delivery system is definable in terms of use of facilities and manpower. Although satisfactory statistical measures remain to be developed, it is empirically observed that efficiency of manpower use is enhanced, and costs diminished, by combining physician/ dentists with allied health personnel to concentrate the use of the more highly trained personnel upon tasks requiring their special qualifications. Delegation of less demanding tasks, under appropriate supervision, would be made to other, less costly, personnel according to their qualifications and capabilities. For example, it has been found efficient in certain settings to organize "teams" of physicians, nurses, technologists, technicians, etc., with division of tasks appropriate to a particular patient population.

The keys to delegation are, first, the qualifications of the personnel to whom tasks are delegated, and, second, the supervision exercised by the physician or dentist ultimately responsible. The certification process is relevant to both: it defines the perimeter of individual competence as a guide to the physician/dentist or institution in selecting and assigning individual allied health personnel and utilizing them in the interests of efficiency and effectiveness of the delivery system. It is instructive to the physician in deciding the degree and kind of supervision required for members of the several allied health professions.

These economic considerations will become more important as incomes continue to rise and as the nation moves toward some form of national health insurance in the next few years. The demand for health care and for health personnel seems certain to rise. It will be difficult or impossible to meet the demand and to restrain prices without more efficient use of personnel to economize skills and contain costs. This means even greater reliance on allied health personnel and the processes by which they are qualified.

Health Care Delivery System

Present credentialing practices are criticized as inhibiting the necessary changes in the organization of the health care delivery system. Specific effects attributable to credentialing are difficult to identify and prove. Increased flexibility in the development and use of personnel and in the organization and delivery of health services is incontrovertibly desirable if we are to assure a desired level of care at reasonable costs. Certification offers greater potential for flexibility without loss of control over quality than do other credentialing processes.

The multiple arrangements and relationships among providers and users of health care in the United States today cannot truly be accepted as a "delivery system." It must be more accurately labeled a "nonsystem" and a "cottage industry" because of its unstructured and fragmented form. During the past decade, the rising costs, inequities and inefficiencies inherent in the pattern of health care delivery have been the subject of frequent criticism. The cry of "health care crisis" has been heard from many sides, along with the demand that the nation's soaring expenditure for health services manifest itself in demonstrable improvements in the health status of our population.

The patterns of organization and administration and the financing mechanisms for delivery of health care are in a transitional phase today.

> We are now into the Decade of Transition, a decade when the population of the United States is projected to reach 250 million, a decade when new and evolving forms of organization will become paramount factors in achieving optimal utilization of health resources.[1]

An assessment of major trends appears as a projection in Appendix 5, with particular attention to technological influences upon the structure and methods of the future health care system. The immediate effects of the trends can be seen in several forms which affect the potential role of certification of allied health personnel. The traditional solo practice, with hypothetical free choice of physicians, fee-for-service arrangement with the one-to-one family doctor-patient relationship is becoming less dominant. The role of the hospital in the delivery system has expanded, stimulated by the reimbursement mechanisms of Blue Cross, Medicare, Medicaid, and other third-party payers. These shifts are reinforced by biomedical and technological advances, their heavy use of specialized equipment and manpower, and the focus of medical education.

National health insurance, depending on the form adopted, will influence moderately or very heavily the demand for health services and health manpower. More immediately, important modifications in the operation of Medicare and Medicaid are projected. These programs will be monitored and altered by professional standard review organizations in an effort to control costs and assure quality care. Moreover, attitudes about the proper focus of health services appear to be shifting from a preoccupation with the treatment of acute illness toward conservation of health and prevention of illness, from specialist practitioners to primary care physicians. The changes in attitude are in large part a reflection of a national concern to control the escalating prices of health

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1/ William L. Kissick, M.D., "Organizing the Health Care System," Wharton Quarterly, summer 1970.

services. Delivery of comprehensive health care through health maintenance organizations and expanded hospital-based ambulatory services has been demonstrated. Further, the growing use of a team approach to the delivery of health services has far-ranging implications for manpower and requirements since it entails increased responsibility for and use of allied health personnel.

Prepaid group practices which make available primary care at lower cost are receiving more attention. Through economies of organization and scale, such group practices both encourage and facilitate combinations of medical and allied health personnel not feasible in the typical doctor's office. Similarly, hospital outpatient departments and emergency rooms are being restructured and reorganized as primary providers, with greater emphasis on community health care and linkages to health centers, HMO's, and other community health resources, especially for lower income groups. Neighborhood health centers and community mental health centers are other examples of emergent patterns of organization.

New functions and new allied health occupations are being created in these new settings. Triage personnel, for example, determine the nature and priority of patient needs in the emergency room. Nurse practitioners provide primary care under the supervision of physicians in an HMO clinic. Mobile medical emergency technicians ride in ambulances and render care to patients at the scene of the accident and en route to the hospital, while in telecommunication with the physician in the emergency room.

New staffing patterns and new organizational models requiring innovative use of health personnel are emerging in response to these influences.

The allied health occupations have evolved within the traditional structure in such a way that very few occupations engage in independent practice. Almost without exception, allied medical personnel operate under the direct supervision and under the shield of professional accountability of the licensed physician and the licensed hospital. Dental occupations include more independent practitioners, e.g., dental hygienist and dental laboratory technologist, but these also stand under the shield of the licensed dentist who prescribes the services the allied health personnel deliver. This historic pattern of supervision and organization has undoubtedly affected the evolution of the credentialing processes. The primary emphasis in public accountability has been placed upon the physician, dentist and nurse through licensure; allied personnel credentialing has evolved with other primary emphasis -- the evidencing of the level of marketable skills through certification.

Existing credentialing practices are seen by some observers as impeding the necessary modification of the health and delivery system by limiting manpower supply, failing to guarantee competent and qualified personnel, and barring effective manpower utilization by limiting the downward transfer of functions from physician to nonphysician personnel and hindering the restructuring of job functions.

Alternative credentialing techniques are being developed and tested as possible improvements of the ability of present practices to meet future needs. The principal effects upon certification could come from proficiency examinations and institutional licensure.

Three forms of examinations are now being developed and used in the credentialing of allied health personnel. Certification examinations (and licensing examinations) are developed and used under private auspices to determine the level of competence of practitioners in a specific allied health occupation. These are, in essence, qualifying examinations concerned primarily with entry (or re-entry) into an occupation. Proficiency examinations are developed and used to determine the level of proficiency of practitioners, with opportunity for those whose competence is based primarily upon on-the-job training and experience. Equivalency examinations are developed and used to determine the value of experience and non-accredited education in meeting educational requirements under accredited programs.

The distinctions between these three forms of examination are significant in defining the role of each in a national voluntary system for certification. Both proficiency and equivalency examinations can serve as evidence that an applicant for certification has met some of the standards for certification by procedures carried out under the auspices of other bodies. Our national tradition of an open labor market, and the public policy expressed in PL 92-603, lead us to conclude that a succession of hurdles, all dealing with the same substantive conventional path in acquiring job skills, would constitute an excessive, and thus discriminatory, barrier. Competition or conflict between three forms of examination would have wasteful, destructive effects upon the health care delivery system. The equitable integration of all three forms of examination becomes, therefore, a major problem to be solved within the national certification system.

Another experimental credentialing mechanism, institutional licensure, could enhance the value of the certification process. Institutional licensure, applied to health personnel regulation, would assign to administrators of health care facilities the responsibility for establishing personnel practices that assure the quality and proficiency of health personnel.[1/]

The proposal of institutional licensure in the health care delivery system does not eliminate any of the reasons for the use of valid certification processes for credentialing allied health personnel. The licensure of an institution would eliminate the need for individual

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[1/] Nathan Hershey and Walter S. Wheeler, Health Personnel Regulation in the Public Interest: Questions and Answers of Institutional Licensure, California Hospital Association, 1973.

licensure -- granting of authority by the state for an individual to perform certain acts which it is in the public interest for the state to regulate. The institutional licensure would substitute discretionary delegation to the institution for the statutory or regulatory specification of scope-of-practice and corresponding personnel qualifications. It would not eliminate any of the current needs for credentialing of individual competence. In fact, the increased direct accountability of institution managers for the competence and adequate placement of employees under institutional licensure can create even greater needs for valid and reliable credentials as an aid to personnel assessment in a mobile labor force.

Law

The certification of allied health personnel is definitely affected by a number of influences arising from laws, regulations, and other uses of authority. We have discussed, elsewhere, some distinction between certification and licensure. The other influences of major importance are related to (1) liability for malpractice claims, (2) eligibility for reimbursement or payment for services, (3) equal protection of citizens under the law, (4) possible effects of antitrust statutes upon the feasibility of a national voluntary system, and (5) collective bargaining rights of employees.

The most pervasive legal influence upon health manpower credentialing is the extensive set of state licensing statutes. Under these laws, the permissible scope of practice by health personnel is defined and provision is made for evaluation and licensing of persons meeting minimum standards. Licensing has been applied to a number of allied health occupations, but these cover only a small percentage of the total personnel involved.

Three types of statutory provisions are relevant to our problem. Some laws provide a detailed definition of permitted scope of practice and require legislative action to revise them. A second type permits state regulatory bodies to establish the detailed definition of permitted practice. This type offers greater flexibility in the revision of job structure. The third type of provision is that which permits physicians or dentists to delegate tasks to appropriately trained subordinates. The current experiment with "institutional licensure" is, in effect, a major extension of the authority to delegate health care tasks.

Although these statutes do not directly affect certification, they do have indirect influence through effects upon the structure of duties which can be assigned. The consequences are discussed at length in Chapter 4.

The liability of an institution for the actions of persons permitted to practice their occupation within its facilities was greatly extended by the decision in Darling v. Charlestown Community Memorial Hospital (Illinois). The doctrine adopted in this case has since been adopted in some other state jurisdictions. The primary effect was to hold the hospital accountable for the competence of performance by all persons it permitted to use its facilities in treatment of patients. It can be strongly inferred, therefore, that the hospital administrators and others employing or granting staff privileges to health personnel must be able to ascertain that the persons involved do, in fact, have sufficient competence to perform the functions permitted or delegated. A nationally accepted system for valid certification of allied health personnel would make this task much easier without restricting the geographic mobility of health manpower.

Very few allied health personnel function as independent practitioners. They are normally protected from personal liability by the supervisory responsibility of the medical or dental practitioner who supervises or prescribes their work. As a result, the malpractice liability of allied occupations has been virtually nil to date. The effect of new formats for delivery of health care is uncertain since patterns of supervision and accountability have not fully evolved. It seems clear, however, that the need for reliable credentials attesting to current competence will be stronger in the future.

Another landmark legal decision relevant to credentialing was handed down in Griggs v. Duke Electric Power Company. The key aspect of this decision was its requirement that test questions, used in employment practice, must be directly related to the duties of the positions for which the test is being used. Otherwise, the test was ruled to be discriminatory. This was applied to promotion examinations as well as entrance tests. It should be noted that this same doctrine has been applied for many years in Federal, state, and municipal civil service systems.

If this same rule of fairness and relevance were to be applied to certification and licensure, as conceivably it can be, it could have a major influence upon the standards and examining methods used in credentialing. It would appear to lead toward greater emphasis upon specifically practical, as distinguished from generally intellectual, qualifying criteria and standards.

The same emphasis on job proficiency is clearly laid out as a public policy in the provisions of PL 92-603 (H.R.1) amending the Medicaid provisions of the Social Security Act. This law clearly establishes proficiency examinations as the standard for eligibility to receive reimbursement for services performed. The language of the act covers the entire field of allied health occupations. A more comprehensive view of proficiency testing is being implemented through provisions contained in PL 91-519. It is seen there as a credentialing mechanism that may be used to increase opportunities for job mobility, both career and geographic; to provide a guide for the relevance of formal training to the requirements of the job; and to assist in establishing standards of performance that can be applied uniformly across the country.

The question of legality, under antitrust laws, of a voluntary association of certifying bodies was examined. The issue had been raised in litigation between some of the organizations included in our study. The courts had ruled, in effect, that the persons who voluntarily form an affiliated relationship cannot subsequently challenge the legality of the arrangement under the antitrust laws. Specific concepts of a national certification system organization were not formally submitted to the Department of Justice for review, but a limited exploration of the antitrust issue developed the view that as long as affiliation is on a voluntary basis open to all certifying groups meeting standards, there would be no restraint of trade involved.

The right of employees to organize and bargain collectively with their employers is an established legal right. Allied health occupations covered in this study have not been extensively organized by major labor organizations. Some personnel in government hospitals are affiliated with the American Federation of State and Municipal Employees and with unions of Federal employees. In some cases, state affiliates of allied health professional associations have acted as bargaining agents for their members in labor disputes and contract negotiations. This aspect of the professional association's role does not involve its participation in certification. Continued complete separation of these functions appears necessary in the public interest in order to preserve the role of certification as an objective credential of professional competence on which the certifying organization is acting in the public interest.

Two recent actions by officials of state government are worthy of note in connection with the legal influences upon licensure and certification.

1. Under the aegis of the Minnesota State Department of Health, a comprehensive program for planning and management of state health manpower resources is being designed and implemented. The program is intended to include the training and credentialing of all levels of

health-related personnel. Although still in the formative state, the program appears to recognize a basic distinction between certification and licensure while acknowledging the inherent values of each. In addition, a third function has been identified as relevant to the planning function; that is, the maintenance of a roster of all qualified personnel in the state, regardless of current certification or licensure status. This process is being called "registration."

2. One allied health association, the first in its field to establish an operational certification system, was directed by an official of the State of Florida to cease using the word "certified" in connection with its credentialing. The association, rather than undertaking legal action, now calls its certification function "classification." This action was, in view of the relation of governmental authority to licensure and other credentialing processes, a conciliatory response to, at best, a questionable exercise of authority possibly definable as an ultra vires action.

Education

During the last decade we witnessed a proliferation of allied health training and educational programs which have produced an increasing number of persons trained in a growing number of allied health fields. Such programs are based in universities and colleges, technical and vocational schools, hospitals, proprietary schools and military training centers. A characteristic of the basic preparation for a career in a health field that is common to all settings is the combination of didactic classroom instruction with clinical, usually hospital-based, work experience, requiring the active collaboration of educators and practitioners in the process. The development and expansion of educational programs, encouraged by the Federal Government in the effort to ameliorate the shortages of health manpower, placed great strain on the mechanisms of accreditation and certification. The organization and administration of the systems of accreditation and certification are being assessed in terms of their efficacy.[1] Of special concern is the effect of existing credentialing practices on the public interest.

The AMA in collaboration with 25 national medical specialty and allied health professional associations establishes the standards required for approval of educational programs in 22 allied health fields. As of September 1973 a total of 2,665 educational programs have received AMA approval. "Although more than 2,000 of these educational programs are based in hospitals, there is also a significant trend toward junior college and vocational school sponsorship of allied medical educational programs," according to an official of the AMA.

Recent surveys conducted by the American Society of Allied Health Professions and by the American Association of Junior Colleges revealed the tremendous growth of allied health educational programs since 1960. In the 11 years in which the actual number of graduates was surveyed, 1959-70, a total of 112,000 persons were educated in 4-year allied health educational programs. Approximately 5,000 students graduated from baccalaureate health programs in 1959-60; the annual number of graduates more than tripled in the decade and reached 18,330 by 1969-70 and approximately 22,000 in 1970-71. Four-year programs are expected to continue to expand annually, and the 1975-76 class size will be 37,011 according to the estimates of educators.

The number of junior college graduates has grown even faster, from 4,365 in the first year of the survey, 1959-60, to 25,312 by 1969-70, to an estimated 34,760 in 1970-71. For every graduate of a junior college health program in 1960, there were eight in 1971. More than 150,000 students graduated from junior colleges in allied health field specialties in the years 1959 to 1971.[1]

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[1] See the definitive study of accreditation of selected health educational programs. SASHEP, Accreditation of Health Educational Programs, Parts I (October 1971) and II (February 1972) and the Commission Report (May 1972), Washington, D.C. To obtain copies, contact the National Commission on Accrediting, Washington, D.C.

In addition to the basic programs given in baccalaureate and community colleges, there are aide-level programs which "might be characterized as 'in-service,' 'on-the-job,' or 'apprentice' training, usually offered by, and conducted in, hospitals -- or in high schools, technical/vocational institutes, or associate degree-granting institutions."[2] Here again, practitioners as well as educators are preparing allied health workers. Other short-term courses, distinct from programs leading to a degree or certification, are offered in a variety of settings to meet the needs for continuing education, refresher, orientation, upgrading, and so on. Organized, comprehensive career development programs are uncommon in American hospitals. The American Hospital Association reports that only 17 of 7,000 hospitals had such practices in 1973.[3]

The rapid pace of educational innovation in the allied health field in the last decade has been marked by a noticeable shift from hospital-based and on-the-job training to college educational programs with a clinical component. There has also been a marked increase in the amount of time required for the basic preparation to enter an occupation, so that 1-year programs have tended to become 2-year programs and associate degree programs to become baccalaureate. The 1971 Newman Report on Higher Education attributes the continually rising standard to employers' responding to the increasing supply of trained individuals. Since the allied health occupations were in short supply in the 1960's, it seems more likely that the impetus for higher standards lies with the professional associations.

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[1] U.S. Department of Health, Education, and Welfare, Public Health Service, Allied Health Education Programs in Senior Colleges/1971, compiled by the Association of Schools of Allied Health Professions, DHEW Publication Number (NIH) 73-241; and Allied Health Education Programs in Junior Colleges/1970, compiled by American Association of Junior Colleges, DHEW Publication Number (NIH) 72-163.

[2] U.S. Department of Health, Education, and Welfare, Allied Health Education Programs in Junior Colleges/1970, p. 10.

[3] "Career Mobility Challenge," Hospitals, vol. 48, January 1, 1974.

New institutions, programs, curricula, and methodologies have required rapid adjustments and developments in credentialing. Programs in blood banking specialist, physician assistant and medical laboratory assistant, introduced in the last decade, reflect the technical specialization and restructuring of functions that are occurring in health occupations. Such developments have a ripple effect on existing certifying systems, challenging them to attest to the competence of practitioners in new specialties and new roles, or establishing conditions that give rise to the organization of a new certifying body.

The educational establishment is being asked not only to be responsive to the needs for additional qualified health manpower of all types and levels but also to act to resolve the maldistribution and malutilization of health personnel and other problems in the health sphere. The Carnegie Commission report of October 1970, for example,

> ...recommends that university health science centers should be responsible, in their respective geographic areas, for coordinating the education of health care personnel and for cooperation with other community agencies in improving the organization of health care delivery. Their educational and research programs should become more concerned with problems of health care delivery and the social and economic environment of health care.1/

1/ The Carnegie Commission on Higher Education, Higher Education and the Nation's Health: Policies for Medical and Dental Education (New York: McGraw-Hill Book Co., October 1970).

In fact, area health education centers, proposed by the Commission, have been organized in an effort to upgrade medical services to underserved populations and to attract practitioners to serve in geographic areas of scarcity. Schools of allied health professions and allied health science centers bring together a number of programs under one roof. Integrated educational programs provide an environment, it is hypothesized, that fosters favorable attitudes toward new role perceptions and team functioning.

Certifying systems interface with accreditation in a "complex array of interlocking relationships."[1] Most certifying bodies require graduation from an accredited educational program as one of the conditions for eligibility. The professional associations are the link binding accreditation and certification. The linking pattern has a number of variations; for example, a single professional association may sponsor and control both the accreditation and certification processes, or several professional associations may collaborate in sponsoring the two processes. Another of the existing arrangements has separate and independent certifying and accrediting bodies, controlled in each case by persons actively associated with one or several professional associations. In some cases, membership in the professional association is a requirement for certification.

The close ties between accreditation and certification raise such questions as whether certification for initial entry into the occupation is redundant and whether certification is more appropriately used to attest to continuing competence. Moreover, there is the doubt whether the present structure of certification which gives a dominant, if not exclusive role to the professional associations, "is structurally and functionally attuned to current societal needs, demands, and expectations...."[2] Recognition of the barriers that accreditation and certification have raised to persons who acquire their knowledge and skills through non-traditional routes underlies the development of proficiency examinations.

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[1] Karen L. Grimm, "Relationship of Accreditation to Voluntary Certification and State Licensure," SASHEP: Part II -- Staff Work Papers (Washington, D.C., February 1972, p. I-1).
[2] Ibid., p. I-11.

Technology

Major new capability to deliver health care is flowing continually from advances in health-related research and development. New technological advances produce associated changes in performance techniques and their underlying requirements for knowledge and skill. As the innovations or improvements are diffused into the health care system they constitute one of the major forces affecting the type, quality, and quantity of allied health personnel required.

The increasing rate of development of new health technology observed in recent decades has accelerated and is forecast to continue for the future. The major trends are summarized in a scenario (Appendix 5). Credentialing of allied health personnel is strongly affected.

New technology requires each competent person to pursue continued study and training to integrate the new knowledge, equipment, and technique into his practice. It also necessitates repeated modification of content and methods of education and training. The standards for certification require revision to maintain their relevance to the future if the process is to perform effectively as a gatekeeper on the competence of new entrants into the occupational field.

Information concerning new developments filters through the allied health community by way of a largely informal network. The stimulation of this flow is accepted as a significant responsibility by the professional associations that we contacted. The need to link certification and the effects of new technology has now been recognized. Initial emphasis is being placed upon continuing education. As yet, no formal requirements for re-examination or re-certification have been adopted by the certification systems we studied. Some officials have recognized the absolute necessity of an effective control to assure continued competence on the part of persons already certified. A few are beginning to examine the desirability and feasibility of recertification.

Quite apart from the relation to credentialing, we note a definite opportunity to improve the rate of diffusion of new technology, with consequent improvement of health care. Continued reliance upon industry sales effort, with associated training, and other current practices will probably fail to meet the needs of a future health care system with expanded demand due to national health insurance. Systematic identification, assessment, and communication of technological potential not only are needed but definitely are feasible.

CHAPTER 4

ANALYSIS OF OPERATIONAL EFFECTS OF CERTIFICATION

Introduction

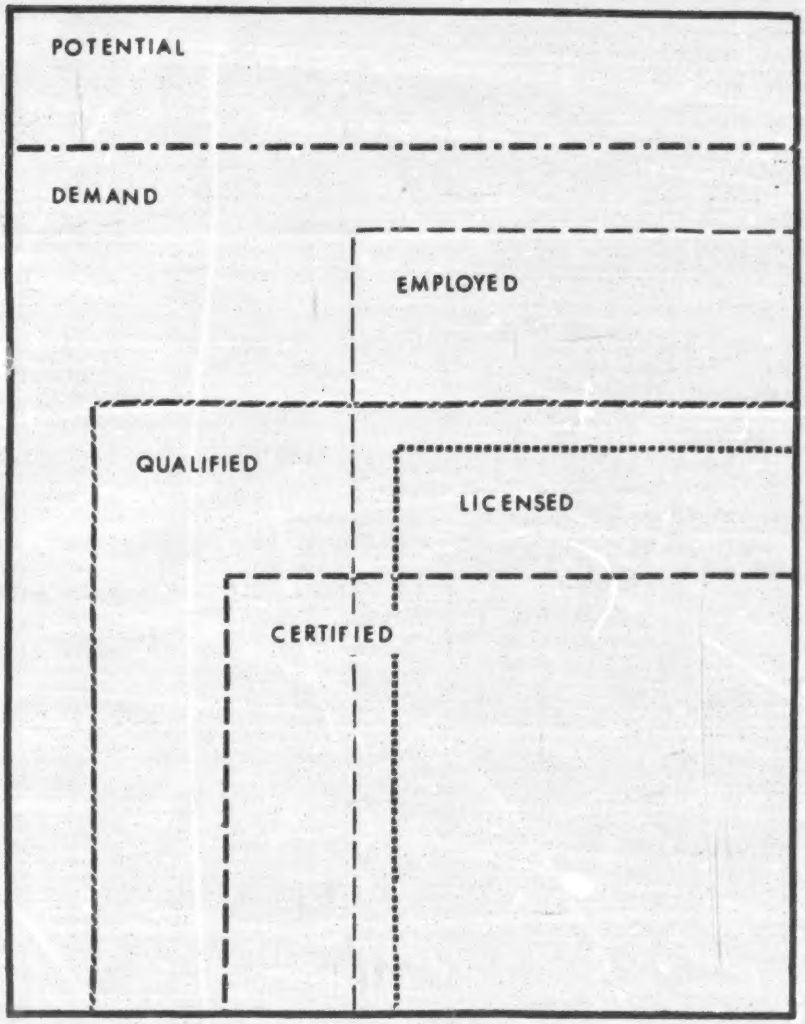
The broad-ranging views expressed in the interviews and feedback seminars dealt with major operational effects of a national system of certification upon: manpower supply, accountability, professional quality, occupational dynamics, research, and information system. Additional significant findings and reinforcement to some of the preceding findings result when these functional aspects are analyzed.

Manpower Supply

Actual data are not available for describing the general character of the allied health manpower pool. We can see the major variables in characterizing the relative role and effect of certification on manpower supply when the principal segments of the general pool are represented as in Figure 4. Two important assumptions must be made explicit. First, we assume that all standards have been validly defined and accurately applied; e.g., qualified people are indeed qualified, certified people have met criteria that represent current qualification standards, etc. Second, we assume that effective demand exceeds current employment levels in the health care system and that the potential sources of manpower can produce, under proper priority emphasis, more than the effective demand.

Figure 4

PRINCIPAL SEGMENTS OF THE ALLIED HEALTH MANPOWER POOL


POTENTIAL
DEMAND
EMPLOYED
QUALIFIED
LICENSED
CERTIFIED

Note: The area of segments does not represent either actual or estimated numbers of personnel.

From Figure 4, we observe the problem aspects of manpower supply; unfilled demand, unqualified employees, unemployed qualified people, oversupply of qualified people, qualified employees who are not certified or licensed, certified personnel who are not licensed and vice versa. Equilibrium within the pool may be achieved without changing this pattern. But, effective utilization of health manpower resources does dictate a reduction of the proportion of the pool falling outside the credentialed, qualified, employed segments.

Views about the supply of allied health manpower were elicited during the course of the interviews from the discussion of two hypothetical "critical situations" (see Appendix 1) dealing with an analysis of the current and future manpower situation for the particular profession and the prospect of national health insurance. Certifying organizations are concerned about the quantity of manpower available in their fields.

The importance of forecasts of manpower requirements for certifying bodies was stressed; one respondent said that the collection of data about the future manpower situation for the profession and the current employment level and supply was the "number one concern of the certifying board" for which he worked. In the past, substantial shortages have existed in almost all allied health occupations. Major recruiting efforts have been launched. While some occupations continue in short supply, others are concerned now with problems of maldistribution and surpluses. Some professional associations have stopped their recruitment programs.

It was possible to infer from some of the interviews a concern about the economic stability of the occupation. Much more emphasis was placed, however, upon professional quality and occupational structure than upon the quantitative aspects of manpower supply.

There was general agreement that the passage of a national health insurance program would radically change the manpower supply picture. Most respondents envisioned markedly increased demand for services that would be difficult, if not impossible, to meet without additional manpower.

Data currently available from the Federal Government and other sources are generally considered inadequate. In large part, they are already out-of-date when published and are national rather than regional and local in scope. It was suggested repeatedly that a national system organization could make a contribution in collecting reliable data and in assessing current and future demand and supply for various occupations.

Credentialing practices, including certification, exercise influences upon entry into an occupation and thus affect available manpower supply. However, interviews and seminar discussions brought out the greater significance of class size and the number of accredited educational programs as determinants of the number of new entrants into the field. The degree of influence exercised by the certification process is limited and varies among occupational fields. The extent of its effect can be gauged by the proportion of practitioners who are certified. Among the occupations studied, this measure varied widely, ranging from approximately 10 percent to almost 90 percent.

Certifying bodies can affect allied health manpower supply through (1) the eligibility requirements; (2) the score required to pass the certification test; (3) formal recognition of different levels of skill in the occupation; and (4) influence upon employers to accept certification as a desirable or necessary qualification.

Structuring of eligibility requirements for certification to recognize increasing levels of competence and the development of significant specialization can improve the balance between demand and effective supply. The balancing effect would flow from the contribution to better matching of qualifications to requirements in a nationally fluid labor market, facilitating the adjustment of regional maldistribution of the supply. Added effects could derive from the motivational stimulus of clearer definition of the channels and stages for upward and lateral career mobility.

Consideration of the manpower supply in allied health occupations cannot proceed on the sole assumption that the system is operating in the public interest if there are enough centers of education and training with adequate feedback to avoid wasteful oversupply. The system must also protect the interests of those persons in the society who cannot or do not follow the conventional pattern in obtaining their qualifying knowledge and skill. Input to the labor pool from these nonconventional sources can be as real a cause of oversupply as if the formal educational and training centers had produced it. A practitioner who has achieved adequate levels of competence by nonconventional routes is entitled to the same concern for continued employment and updating of capabilities as one who has the more traditional background. If the certification process is to operate as the public-spirited gatekeeper for allied health manpower, it must have adequate mechanisms for recognizing and dealing with the products of both conventional and nonconventional sources of trained personnel.

The maintenance of balance between supply and demand for personnel in an allied health occupation is not directly a function of the certification process. Certification credentials the level of competence of all persons who meet the standards on the several criteria of competence. If too many or too few persons, in relation to effective demand, meet reasonable standards of competence, this becomes a fact derived from operation of the certification system. But, other than reviewing the standards to assure their equity and relevance to job requirements, the certification system plays no active role in correction of the supply imbalance. Raising or lowering the standards for certification to make larger or smaller numbers of persons appear to be competent to perform the duties of the occupation would be a perversion of basic philosophy of professional certification. Before such a function can be added legitimately to the role of certification, it will be necessary clearly to establish public acceptance of a dual role of regulation of manpower supply as well as protection of the public's interest in adequate competence. Such a regulatory function is contrary to the tenets of an open, free labor market.

The legal introduction of proficiency examinations into the credentialing system was discussed in the preceding chapter, as were the three major forms of examination used in credentialing. We found general recognition that PL 92-603 mandated their broader application in allied health fields. In the interviews there were frequent criticisms of the proficiency examination, primarily expressing skepticism of the ability to design a comprehensive, reliable and valid test. Although several of the organizations are actively developing a proficiency exam, several expressed misgivings about the concept that a person can be adequately prepared, especially for the "professional" level, through on-the-job training and experience without formal academic studies. This skepticism is reflected in uncertainty about the acceptability of a passing grade in lieu of other credentials. However, one certifying body in the study opened its regular certifying exam to all who have worked a number of years in the field as well as to graduates of accredited educational programs and found that 72 percent of the non-academic candidates passed.

This fragmentary experience will soon be augmented by experience with the primary care physician's assistant and other occupations. It would appear, at this time, that the integration of proficiency examinations into the qualifying process for certification would open another channel of opportunity to enter the credentialed manpower pool.

Several specific features of certifying procedures have been singled out by some observers as operating in a way to restrict manpower supply. This study has not examined the procedures in sufficient detail to dispose of the questions definitively. We did not, however, find any substantial evidence of restrictive intent in the following procedures:

1. Test scores established for each certifying examination are changed, in some cases, from year to year. The only basis we found for these changes was the valid one of adjustment for variation in the relative difficulty of each new version of the test. In general, the shortcomings in testing arose from need for research in test construction and administration rather than from either incompetent or publicly irresponsible practices.

2. Eligibility to repeat examinations was generally open. In some occupations, failing applicants were eligible to sit for future exams, while in others coursework had to be repeated. A large proportion of failed applicants each year were repeaters. No appeal procedure for failed applicants was reported.

3. Analysis of the test results can provide significant information for improvement of education and training on the one hand and the standards of credentialing of personnel on the other. Some associations reported analysis of the results of examinations and the sending of composite information to the schools about the performance of their students. No group reported studying examination results to determine the implications for the supply of available manpower in different areas.

Accountability

Four aspects of accountability were identified in the interviews with the certifying organizations:

1. Accountability to their members
2. Accountability to other elements of the delivery system -- physicians, dentists, hospitals, and other institutions
3. Accountability to patients
4. Accountability to "the public" in an institutional sense.

Not surprisingly, the certifying organizations and registries generally displayed a strong sense of accountability to their members for establishing, maintaining and defending standards of competence and proficiency over the entire range of knowledge and skill that defines the profession. The certification process is seen as a means of both including those who meet the standards, as evidenced by prescribed educational achievement, experience and examination, and excluding those whose knowledge and job proficiency are substandard. In this way, certification protects the profession from debasement by less-than-competent practitioners and ensures consumer-patients of high-quality health care. For both of these, the organization must account to its members.

In discharging this responsibility, in some cases, organizations have found it necessary to differentiate among types or levels of practitioners of the profession. Sometimes these are differentiated by levels on an "occupational ladder" (e.g., "assistant," "technician," "technologist"); sometimes by specialty within the profession. In such cases, the differentiation of role is shown by corresponding designations.

The majority of certified personnel perform services associated with medicine or dentistry or within a system for delivery of medical or dental services. The knowledge and skills attested by the certificate must be equal to the tasks assigned to or undertaken by the certified personnel. This equation is a major concern to the certifying organizations. On the one hand, they characteristically regard themselves as the experts in the specialties and techniques of their profession, capable of setting the standards of competence and qualifications for adequate performance, and partners with the physicians and dentists in defining and delivering high-quality care. On the other hand, they find themselves required to account to the medical and dental professions for their training and competence and to admit these professions to the planning and accreditation of the education and training programs by which they are qualified. It is, after all, the physicians and dentists who ultimately can decide who, and with what qualifications, is to be employed and assigned to what work.

A degree of ambivalence has developed among allied health personnel in their accountability to the medical and dental professions. On the one hand, they wish to share as professional partners in the common effort to provide high-quality care. On the other hand, they sense that they can share mainly on terms laid down by the physicians and dentists. Thus, it is not uncommon to find spokesmen for certified allied health occupations who identify professionally with physicians and dentists and at the same time resent the attempts of organized medicine and dentistry to dominate them.

The certified allied health personnel are not primary targets of liability and malpractice actions, as are physicians, dentists, hospitals, and other institutions. But the professional organizations are cognizant of the attendant risks of legal liability. Some associations have accepted the responsibility to help members cope with this aspect of accountability by provision of malpractice insurance and by definition and maintenance of standards and scope of competence.

Quite apart from legal liability, there is universal recognition of accountability not only to the physicians, dentists, and institutions that assign and direct their work, but also to the patients themselves for the quality of care. Again and again, in different terms and contexts, one central theme was repeated: this form of accountability is the basis of their acceptance as public interest organizations. One senses from these repeated references that the organizations involved in certification perceive that without this recognized shared responsibility for the quality of patient care they would be regarded as protective professional and economic guilds.

An institutional accountability to our whole society derives from the concept of "the public interest." The study team explored the adaptability of major organizational mechanisms for incorporating this accountability into a national voluntary system. The use of public membership in the national system organization appears to be the only strategy by which the voluntary character of the system can be maintained.

Propositions that "the public" should be represented in organizational decision-making in the system, to give a voice to "the public's interest" in the certification process, generally evoked a "Yes, but..." response during interviews and seminar sessions. Responses ranged from the view that "public" representation is "inappropriate" or "political" to expressed doubts that it was possible to find qualified public representatives and define a legitimate role for them. It was generally agreed that representatives of the general public would not be competent to influence or decide professional/technical matters. If qualified people could be found, however, they would have a legitimate concern and voice in matters dealing with the equity and fairness of certifying systems, the effectiveness of health delivery systems, cost of services, and public policy affecting these.

A balanced assessment of the types of accountability and the need to have a responsive organizational apparatus leads to the conclusion that other parties-at-interest, including the general public, must have more than token representation or a limited advisory role in the management of a national certification system. The strongly held view of the certifying bodies that membership in the system organization should be limited to them alone is not compatible with the definite interests of other health system elements and certainly would not satisfy public accountability needs. The specific organizational options for such representation are discussed in more detail in Chapter 6 of this report.

There is unquestionably a direct relationship between the quality of the educational and training process through which a student passes and the subsequent performance capability of that student. The public interest lies directly in the performance capability. The efficacy of the processes for the development of job capabilities takes a secondary position in the public interest because the public has a more direct and visible stage at which it can perform its evaluation and exact its accountabilities -- the point of delivery of health care services. Even so, this secondary level of public interest must not be ignored. Hence, there is a strong continued need for public participation in and support for the accreditation process.

The public interest does require, however, the clear separation of parties-at-interest in any function from the dominant control of the public processes of evaluation of the social consequences of their own activities. Therefore, organizations that accredit educational and training programs must not be permitted solely to perform the certification of competence of the practitioners who apply the knowledge and skills taught in those programs. Unless this separation is maintained, a definite conflict of interests is created. Such a conflict can be avoided by placing the certification process under control of an organization (or apparatus) which can independently represent the public interest -- an organization (or apparatus) not subject to domination by special interests, whether these are educational, economic, medical, or consumerist.

Professional Quality

Without exception, representatives of professional associations and certifying organizations saw that the raison d'etre of certification is the establishment of qualifications required to enter the profession and to assure a standard of competence among practitioners. It was widely held in the interviews that no one other than members of the profession and the related medical specialty is qualified to determine professional standards.

Continuing Professional Qualifications

Because both certification and graduation from an accredited education program credential the new entrant, some respondents believe that a more important function of certification is to attest to the continued professional qualification of practitioners. The AHA Quality Assurance Program and the future activities of PSRO's and other peer review procedures can validate or challenge certification standards and make it especially urgent that provision for maintaining professional quality be incorporated into the certification process.

Two methods for attesting to the current level of competence of practitioners were examined during the study. Most of the professional organizations in which interviews were conducted have given serious attention to both. First is re-examination with the alternatives of written or demonstration tests. Second is re-certification, with or without re-examination, on the basis of mandatory requirements for continuing education. There was slightly greater willingness expressed in the interviews to establish a re-certification procedure based on evidence of continuing education rather than to institute a re-examination process.

The need for updating competence and the corresponding need for continuing education were uniformly emphasized. Indeed, some certifying organizations see this as the unique responsibility of the certification organization, as distinct from the requirement of accredited education, on the one hand, and licensure, on the other. Most certification systems are working to resolve the difficulties of providing opportunities for continuing education for members of the profession and the problems inherent in measuring and certifying continuing competence. Some certifying bodies have well-developed and long-standing programs of continuing education, while others are just initiating them. Some systems are discarding techniques, such as the "brownie-point" system, that others are introducing. Most certifying organizations disseminate current professional intelligence in journals, and some distribute audio-visual study materials. Others rely upon updating competence through training by supervisory physician/ dentists or by makers of new equipment. Certifying organizations feel that they must establish the certification process as a force motivating certified journeymen personnel to keep abreast of developments in technology and technique and that this characteristic is a distinguishing virtue of certification. A national system could serve as a forum for the exchange of ideas on such mutual problems and activities and for the coordination of standards set by different professional groups having common knowledge and skill requirements.

Factors Potentially Weakening Certification

Certification is effective when employers use it as a hiring requirement or a basis for higher pay for demonstrated competence or greater responsibility. However, its utility is diminished, it was pointed out, when the criteria for certification are not relevant to job duties and responsibilities, which vary in different settings and change over time. For this reason, role definition and certification standards are continually under review.

The effectiveness of certification is threatened by several forces. Those mentioned by our respondents include (1) jurisdictional disputes among certifying bodies applying different competence standards in the same occupational field and contesting the control of overlapping functions in emerging occupational roles; (2) pressure for state licensure; (3) potential use of proficiency examinations as a competing system to certification; and (4) the number of non-certified persons working in the field. It was suggested that a national organization can address the problems that reduce the effectiveness of certification.

Conflicting standards for certification between competing certification systems do exist. Three of the occupational fields studied definitely raise this problem -- medical laboratory technologist, technician, and aide; primary care physician's assistant; and radiologic technologist. The conflicts are based primarily upon substantial differences in the levels of required education and disagreement on the acceptability of certain types of education or training. In one case, conflict was reported over the ethical question of permitting practice involving treatment by other than licensed medical physicians.

Legal considerations, discussed earlier, and a real public interest in a sound credentialing process based on performance requirements for quality health care at a tolerable cost, impel us to conclude that each certifying organization has a right to continue to perform its services. But, the conflicts between standards applied must be resolved voluntarily to the extent needed to assure equal protection of public interest in adequate quality of health care and non-restrictive effects upon the labor supply.

In general, licensure was not encouraged by all the national organizations included in the study. Some professional associations covered by the study have taken a stand in opposition to licensure, citing the rigidity of the law, career and geographic immobility, and inadequate and varying standards as their reasons. However, several of the selected occupations were licensed in some states, usually as a result of campaigns waged by state affiliates. Other allied health occupations have vigorously espoused licensure and have achieved broad coverage, e.g., physical therapist, dental hygienist, pharmacist. A national certification system could aid materially in defining the issues and resolving the possible roles of certification when an occupation is licensed (e.g., as a prerequisite for licensure or as a credential of continuing or higher levels of competence).

Collective Bargaining and Professional Identity

Many of our respondents articulated their concern with the professional identity of their occupations. They spoke of the knowledge and skills that are attributes of their profession and of the discrete area of expertise in which members of the profession are uniquely qualified. Their perception of a "professional image" was often reflected in responses to the "critical situation" about union activity that was used in the interview. Union organizing efforts and collective bargaining negotiations have affected some members of the occupations studied to a greater degree than others. Respondent reaction to the spread of unionism among hospital employees varied, therefore, from indifference to mild distress to a readiness to wage war. Strong objections were voiced to having allied health personnel, even at the assistant and technician level, included in collective bargaining units that covered a variety of nonprofessional or nonmedically-related personnel. A few respondents feared that members may decide that they do not need both a union card and certification and that union dues buy them more than certification fees. At the time of the interviews, the National Economic Council was being organized to serve as the collective bargaining agent for a confederation of allied health associations. The pros and cons of formal affiliation were discussed by several respondents. At one extreme was the view that union-like activity was antithetical to the "professional image" and to the certifying function. At the other extreme was the view that individuals applied for certification in order to enhance their economic status and that collective bargaining is necessary to achieve their goal. Several respondents reported that their associations were involved in formulating a policy and strategy to respond to union activity. It was recognized that the spread of unionism would create situations that a number of certifying organizations were largely unprepared to face.

The credentialing function is sufficiently independent, however, from the economic bargaining role that there need be no effects upon the certification system beyond one major public policy issue. It seems clearly in the public interest to ensure that a qualified person can obtain his certification credentials regardless of union or association membership and without need to resort to collective bargaining.

Role Definition and Occupational Dynamics

A major finding of the analysis is that role definition is still a major process underway in the community of health manpower. There is ample evidence of this state of flux in the following five major factors:

1. Competition between occupations
2. Competition between spokesmen for the same occupation

3. Competition with external forces for control of the occupational field
4. Changes in techniques of health care
5. Changes in the structure of health delivery organizations.

Added pressures for role differentiation flow from variation in patient type, availability of new technology, and varied types of work site.

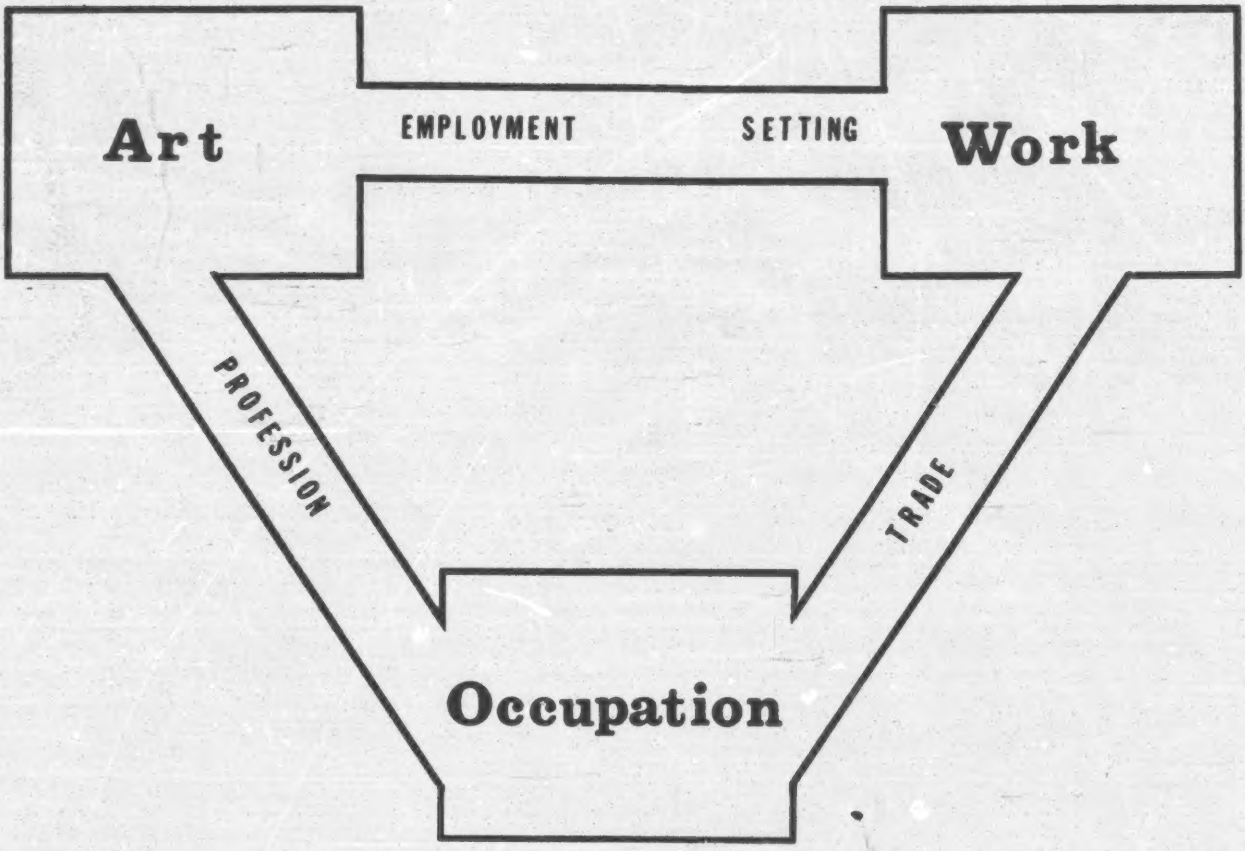
Occupational dynamics and occupational identity are further significantly affected by a triad of factors. If these factors are represented in a triangle, as in Figure 5, with the type of relationship represented as sides of the triangle, the differences between professional, trade, or employment identities can be more clearly understood.

The major factors are:

1. Art -- the combination of knowledge, techniques and personal skills
2. Work -- the set of assigned obligations and duties in a particular working situation. Work also involves the organization structure, objectives and resources, etc.
3. Occupation -- the combination of technical, social and economic factors which identify a functional role in society.

Technical and economic factors that are characteristic of a "trade" or working occupation connect "Occupation" and "Work" in the triangular model. Mastery and extension of the organization of the necessary knowledge and skills establish the relationship between "Occupation" and "Art" that constitutes the influences commonly associated with "professions." The type of organization or employment setting in which a person applies the art in performing links "Art" and "Work" to complete the triangle. These factors and the concepts that connect them create the identity structure: socioeconomic identity with the occupation, professional identification with the art, and employee identification with a specific work setting.

Figure 5
FACTORS AFFECTING
OCCUPATIONAL DYNAMICS


Art
EMPLOYMENT SETTING
Work
PROFESSION
TRADE
Occupation

Occupational dynamics, in the context of public interest, brings into play the idea that health occupations evolve by assignment of tasks appropriate to changes in technology or delivery systems. As this occurs, the public must be assured that:

1. Competent people perform
2. Performance is under medical care arrangements that deliver services
3. Services are at a cost that reflects the efficiency gains from this added adaptation or specialization of a function.

Further, the public interest demands some assurance of professional quality or occupational skill in those people who are permitted to hold themselves forth as specialists.

Type and structure of health care delivery units will materially affect the occupational duties assigned and skills required of individuals. This will, in turn, influence the type and "content" of credentials expected. One determinant will be the type of employment agreement implicit in various delivery formats. For example, there is quite a different expectation from credentials in the four types of employment situations:

1. Independent allied health practitioner
2. Individual-to-individual relationship (office aide)
3. Individual-to-group relationship (technologist in a group practice)
4. Individual-to-institution relationship (hospital or clinic staff).

Existing professional groupings within the health occupations will be affected by the growing cross-disciplinary job structures that will develop in the new delivery formats. The certification system needs to adapt to credential combinations of occupations and specialties as they arise. It should not be necessary for a new specialty to be certifiable only as an independent identity. Existing structures and evolving specializations can be coordinated.

One function served by certification is to identify for the general and using public, discrete occupations each requiring a special set of skills. A national system can coordinate the identification of such occupations by establishing standards for relevant certification systems. When it is institutionally strong enough, it may engage in the activities necessary and possible to resolve conflicts between competing or overlapping occupational areas.

The point was repeatedly made during interviews that certification, in contrast to licensure, has the advantage of "flexibility." That is, certification can adapt more readily to changes in technology and delivery systems and can redefine the knowledge and skills required accordingly. Licensure, on the other hand, was seen as freezing the professional scope of duties in statute or regulation and obtruding the "heavy hand of government" into the credentialing process. There was little inclination to emulate one profession that had abandoned certification after succeeding in being licensed in all states. Moreover, it was observed that a license is typically granted once and for all without requiring an updating of skills, whereas the certification process can be adapted to require continuing education to update job competence.

New demands are made on the allied health occupations by new scientific discoveries with their resulting new techniques and new equipment, and by changes in the delivery system. New technology creates new occupations, and new modes of delivery on an increasing scale lead to increasing specialization.

The dynamics of occupational change in the health care system will continue to appear in:

1. Expanded and modified roles and functions of practitioners in relation to the medical and dental professions and to other related occupations
2. Changed standards for entry and performance, as well as the drive for professional identity
3. Recognized "specialties" within the occupation, and added new levels, both higher and lower, on the occupational ladder and new paths on the occupational lattices
4. Changes in scale attributable to increased demands and related changes in the delivery system
5. Pressures for alternative sources of manpower and modes of qualifying practitioners that vary from the conventional accredited-education-cum-clinical-practicum
6. Modification required by economic behavior of the labor market.

The demands for "opening" certified occupations through on-the-job training to create job opportunities for less favored segments of the labor force are seen by some as a threat to the hard-won standards. The question is whether the certification process can exhibit the flexibility which is its claimed advantage, where faced with not only technological changes but equally dynamic changes in the scope, scale, and locus of the demand and supply of medical and dental care.

Research and Information

Geographic and occupational variations in information on such subjects as manpower supply and mobility, re-certification, licensure, new developments in skill and technology, organizational arrangements for the delivery of health care, and continuing education were identified as having considerable interest. Many allied health organizations feel that the available manpower supply, demand, and mobility data are deficient in quantity, accuracy and currency. Historically, manpower supply information has lacked details such as regional manpower maldistribution, availability of skilled instructors, and other decision-relevant characteristics. Should national health insurance become a reality, increased demands for new personnel and a concomitant need for better information are universally acknowledged.

It was evident that no formal information system with regard to certification exists within or among health professional groups. Many respondents, all actively involved in their professional organizations, said that they knew little about the operation of the certification system. Organizations also acknowledged in the interviews that there is very little interprofessional communication on such subjects as certification, core curriculum recognition and development, other common elements of knowledge and skill, and task analysis to identify common work elements. For that reason the invitational Conference on Certification in Allied Health Professions held in September 1971 was pointed out as a singular event. The same conference was criticized for lack of representation of some certifying bodies. The expanding role of the American Society of Allied Health Professions may provide a vehicle for such interchange.

Dissemination of information on new technology and related data is another major concern to allied health organizations. At present, most rely upon manufacturers, workshops, or the occupational grapevine as an admittedly haphazard means of keeping up to date. Some respondents suggested that a cooperative system could provide much more broadly based methods of keeping members up to date on technology and skill developments in the related fields by supplementing the efforts of individual organizations.

The Council of Certifying Organizations could make a real contribution to its members by acting as an organized channel for the collection and flow of information and the fostering of interchanges of ideas and knowledge relevant to health manpower supply and certification policy and procedures. Another possible major role identified for the system's information system is the coordination among professions of education programs, testing, re-certification, and continuing education, peer review, and standard setting in general. The role of the national system organization with respect to research would most clearly lie in the definition and administration of programs of research affecting the certification process. By providing a central organization through which funding could be sought and applied to specific research tasks, the common interests of the constituent members could be better served with a greater payoff for the limited resources that could be obtained to fund research programs.

Specific substantive areas of research identified in the interview data include the following:

1. Examination techniques (this could be carried out in close collaboration with such bodies as the National Board of Medical Examiners)
2. Analysis of examination results and feedback to the educational system to assist in continuous improvement of basic preparation of allied health personnel
3. Continuing education techniques
4. Manpower supply information and projections (these would include both supply and demand elements)
5. The identification, reporting, and assessing of the impact of new technologies upon occupational structure
6. Analysis of the interactions between occupational changes and organizational changes within the health care delivery system
7. The conduct of longitudinal studies of occupational and capability experience.

Research output should be in the form of information to be used in the system's independent policy deliberations by its constituent bodies or other organizations related to the health care delivery system and its manpower.

The possible information and research function related to the system characteristics defined above were included in extended detail for evaluation during the feedback seminars (see Chapter 5). In this way, it was possible to assess the importance of specific fields of research and information activity as well as the broad functions.

CHAPTER 5

POSSIBLE FUNCTIONS OF THE COUNCIL OF CERTIFYING ORGANIZATIONS FOR ALLIED HEALTH PERSONNEL

An analysis of the interview data and relevant published information identified a comprehensive set of possible functions which a national system concerned with certification of allied health personnel could perform. These 49 functions were organized into the following major categories:

1. Establish standards for certifying bodies
2. Determine certification norms
3. Conduct research
4. Collect and disseminate information
5. Mediate or adjudicate interoccupational differences
6. Encourage cooperation and joint activities
7. Perform public relations and representation roles
8. Provide common administrative services.

The detailed set of functions was subjected to intensive evaluation through the feedback seminars and subsequent analysis to identify elements of a feasible functional charter.[1]

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[1] Appendix 3 contains a listing of the 49 possible functions. For a technical explanation of the methodology used to evaluate their relative

Participants in the feedback seminars rated each function according to their perception of its degree of importance in a national system. Individual ratings were combined to produce a composite ranking of relative importance. Three scoring methods were applied. The resulting rank orders were used as guides in defining the proposed functional charter. A number of functions were ranked high in all scoring methods, while others were consistently ranked low. The remaining functions varied in the order of perceived importance in the three scoring methods.

Research, standard-setting, mediation, and fostering cooperation and joint activities were deemed the most important functional categories. The research functions that were given high ratings dealt specifically with the certification process and included cost-saving practices in certification procedures for maintaining competence after initial certification. Of lower ranking, though still important, was the study of the interactions of certification and other forms of credentialing.

Second, almost equal, in importance were the functions relating to establishing standards for certifying bodies: first, to determine criteria, standards, policies, and roles for certifying systems that are responsive to the needs of an evolving health care delivery system and aid in their implementation; and second, to serve as the agent to advise on standards and processes in the establishment and operation of new certifying systems.

The mediating function that was ranked as important dealt with resolving differences arising from the need to certify new occupations or subspecialties with cross-disciplinary characteristics. Cooperation and joint activities were also given a high rating. Of lesser importance, but still ranked high, were functions relating to collecting and disseminating information and performing a public relations role.

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importance to the organization design and detailed rankings, see Appendix 4.

Thus, the broad range of possible functions was reduced, by means of the assessment by representatives of certifying bodies and professional organizations, to five major clusters of functions which form the nucleus of activities for the initial phase of the national organization of certifying bodies. The proposed functions for a national voluntary system for certification are given in Table 2.

Table 2. Proposed Functions for National Voluntary System for Certification

Function	Definition
1. Establish standards for certifying bodies.............	Determine criteria, standards, policies, and roles for certifying systems that are responsive to the needs of an evolving health care delivery system; and aid in their implementation. Serve as the agent to advise on standards and processes in the establishment and operation of new certifying systems.
2. Conduct research....	Study the methodology of test construction and validation; cost-saving practices in certification procedures; methods for maintaining competence after initial certification; interactions of certification and other forms of credentialing.
3. Collect and disseminate information..	Compile regional and national data on current supply, demand, and salary levels for allied health personnel by occupation, by level within occupation, by location, by type of employment situation. Collect and analyze information regarding new technology affecting the occupational structure and certification standards for allied health personnel.
4. Provide for mediating, cooperative and joint activities.....	Provide a structure within which the member organizations and other parties-at-interest can review and coordinate initial and continuing certification requirements; mediate differences arising from the need to certify new professions or subspecialties with cross-disciplinary characteristics. Coordinate the development of joint examination programs.
5. Perform public relations and representation role...............	Serve as a common communications arm to the various legislative and administrative government agencies which have an effect upon certification. Among the pertinent issues which are included in such a function are: (a) image creation for the public, showing

Table 2. (continued)

Function	Definition
	allied health personnel as being worthy of the public's confidence; (b) representation of allied health manpower in consideration of the public issues; (c) recognition of the public interests in allied health competence, as reflected in certification, and translation into policy guidance for constituent members.

CHAPTER 6

ORGANIZATIONAL ALTERNATIVES

Performance of the functions defined in Chapter 5 will require a stable, responsible organizational structure. Without such stability, the fiscal and manpower resources needed to achieve the objective of a national voluntary system cannot be mobilized and used effectively. The public interest in the national system will derive from the ability of the organization to obtain and hold the voluntary compliance of members to its standards and policies, a capability also dependent upon stability and responsibility of the structure.

The recommended form of organization to manage a national voluntary system for certification is a "Council of Certifying Organizations for Allied Health Personnel."

- It is a Council because it is composed of equals in consultation.
- It is composed of certifying organizations, rather than the professional societies associated with the certifying organizations.
- It is for certification of health personnel, because it is the personnel who are certified, not the occupation.

An alternative form of organization considered in the report is a Standing Conference of Certifying Organizations for Allied Health Personnel. This option particularly is considered as a transitional stage.

Organizational alternatives for the structure of the Council are so varied that we presented for discussion in the feedback seminars a set of basic building blocks needed to create a viable organization. A detailed discussion described the most likely alternative forms of each of those blocks. The final design of the charter and structure adopted for the system organization will depend upon the functions for immediate implementation (Chapter 5) and those toward which the system could expand its capabilities.

Upon completion of the analysis of data from the interviews and literature, a single organizational concept appeared to be so attractive an option that material for the feedback seminars was organized around the model -- a council of certifying organizations. Subsequently, during analysis of feedback results, a second concept was developed in the less structured form of a standing conference of certifying organizations.

The alternatives available in designing the organization to manage a national system for certification are presented and discussed, in this chapter, in the context of the Council option. That was the framework used in obtaining evaluative responses from participants in the feedback seminars. Our analysis did not identify any significant problems in applying the same alternatives and constraints in the consideration of the Standing Conference option. Both concepts are defined and discussed in detail in the concluding section of this chapter.

Membership in Council

At the outset, it is desirable to re-emphasize the voluntary, non-Federal nature of a possible Council. Its voluntary nature does not, however, imply that the relationships within the Council would be casual. If it is to succeed, the organizations which affiliate with it must see that act as a positive, active, and durable commitment. At the same time, member organizations and the Council must recognize the right of any member to withdraw from the Council if the interests of the member come into continuing, strong conflict with those of the Council.

The membership of the Council should consist of certifying agencies, professional organizations plus their certifying agencies, and other health-related organizations.

A corporate identity is assumed for all members of the national certification system. That is, individuals and government agencies would not be members but each of the constituent organizations would be an incorporated entity at law. An associated type of membership for government agencies can be devised to facilitate linkage of the system to relevant public policies and programs.

For initial membership in the Council, any currently operating certifying body could be eligible if it (1) uses an examination (written, oral or practical) to determine certifiability, or (2) uses a standard of evaluated education, training and experience, and (3) agrees to contribute to the financial support of the Council.

In addition, membership should be open to allied health professional organizations, both those that do or do not certify, whose members are eligible for certification, Eligibility should be extended to professional groups that do not certify but whose members are eligible in other occupational fields. For example, the American Nurses Association could be a member of the national system's organization because nurses may be eligible for certification as respiratory therapists, radiologic technologists, and in other occupations that are covered by the national system for certification. Other organizations that represent broader public and professional interests in health care should be eligible for membership as well.

During an initial period after establishment of the Council, membership should be available upon application by any eligible organization. For possibly 2 years, other certifying bodies could become members by applying to the Council for membership. If the criteria established by the Council for certification systems are met, membership would be granted.

If membership is denied, the organization denied membership could appeal to a designated individual or body which would arbitrate the dispute. This arbiter should be outside the health field and serve the function of judging only whether the standards for membership have been met. It is suggested that possibly the American Arbitration Association would be a feasible arbitration agent.

Further, no membership standard for new members in the Council should be permitted on which all existing members are not fully in compliance. In other words, the Council should not establish requirements for admission of new members which would bar any of the current members from admission were they not already within the Council membership.

Structural Alternatives

The various building blocks to be considered in designing the organization of the Council are:

1. Type of organization to be established
2. Form of charter
3. Structural representation of members
4. Structural representation of other parties-at-interest
5. Executive element (of membership)
6. Executive direction for the Council
7. Program direction within the Council
8. Administrative support staff

Type of Organization To Be Established

In view of the probable legal obligations and need for contractual authority for a Council, there appears to be no viable alternative to the establishment of the Council as a corporation.

Two alternatives are open by which the Council could obtain the powers and protection at law that it will require:

1. Incorporation as a separate, legal entity
2. Establishment as a distinct subdivision of an existing, corporate entity

Separate:

Advantages	Disadvantages
-- Deals independently with other organizations	-- Needs to expend more resources and time to establish organizational identity
-- Free from domination by the interests and policies of a possible "parent" organization	-- Possible competition with other established groups
-- Greater freedom to change its functions and organization to meet evolving needs	-- Requires more extensive arrangements to handle external relations
-- Greater freedom to develop sources of financial support	-- Financially more vulnerable
-- Greater emphasis on certification as a significant credentialing process	

Subdivision:

Advantages	Disadvantages
-- Greater immediately available staff and financial support	-- Inherits all of the public image and conflicts of the "parent organization
-- Possible use of an existing network of power relationships	-- Possible limitations upon

-- Possible reduction of needs for administrative support staff and facilities	freedom of Council to guide and direct its own affairs -- Possibility of conflict of interest between Council and "parent" organization

It was the view of an overwhelming majority of seminar participants that the organization must be clearly independent of any other existing organization. It would thus be free of conflicts of interest and able to make arrangements with other organizations when necessary to achieve its objectives.

Form of Charter

If the alternative of separate incorporation is chosen, there are two major forms to be considered:

1. Incorporation as a non-profit professional body under state law
2. Incorporation under charter granted by the U.S. Congress

The relative advantage of these two forms can best be contrasted by pointing out that the primary disadvantage of the congressional charter would be the extensive, time-consuming political activity which might be required to obtain the charter or amend it, with the resultant congressional pressures to control the purposes and form of the Council. On the other hand, such a charter might make it possible to obtain Federal fiscal support more easily.

Participants unanimously rejected the congressional charter alternative. Two major reasons were given. First, Federal involvement was viewed as a threat to independent status. Secondly, there has been no problem in obtaining Federal funding for worthwhile programs that would be solved by having a congressional charter, thus negating the possible advantage posed above.

The form of organizational charter adopted to guide the Council could also vary greatly in the degree of specificity in the formal document. The charter of incorporation should, obviously, be as general and broadly worded as legally possible, to give the Council the latitude to deal with any aspect of certification and its relation to the delivery of health care which the Council's governing elements choose to deal with. Evolution of new forms for health care delivery and the dynamic nature of related occupational structures will require a broad legal charter in order to preserve the requisite organizational flexibility for the Council.

Internal organizational structure and relationships, however, can be drawn with increasing degrees of specificity through by-laws and other documents. The primary content of internal documentation should cover:

1. Functions and authority of each organizational element
2. Mode of decision-making in each functional area
3. Eligibility and prerogatives of each class of membership
4. Policies governing the establishment, operation, and evaluation of Council programs and related work groups.

The alternatives available are matters of the degree of detail to be included in the formal documentation. Enough detail should be included to clearly define the power and authority relationships and the accountability channels between members, governing bodies, the executive direction of the Council, and the Council staff.

Structural Representation of Members

Membership can be in several classes or only one class. The members can be organized in a variety of forms to give balanced participation in the Council's decision and implementing activity.

One class of membership:

Advantages	Disadvantages
-- Increases equality of representation of different viewpoints	-- Decreases the role of allied health certifying bodies in the national certification system
-- Reduces procedural problems in obtaining agreement	-- Increases possibility of conflict between diverse groups within decision-making elements of the Council

Multiple classes of membership:

Advantages	Disadvantages
-- Permits wider participation in Council matters without losing primary focus on certification as a process	-- Requires involved, possibly complex, organizational arrangements to assure meaningful input to Council by all parties-at-interest
-- Permits membership fee schedules representative of the functional support given to various types of member organizations	-- Can create image of "second-class" membership
-- Permits differenciation of voting rights of members	

Although there was strong support for one class of membership, the contextual analysis process brings out the limitations of such a design. These limitations, in our opinion, would not be fully overcome by another near unanimous view expressed in the seminar: other organizations should be included through an *advisory* board. Vital values of the public interest in interaction with manpower supply, accountability, professional quality are relegated, thereby, to a secondary or peripheral position. The realization of professional identity by allied health personnel is hampered when the link between the professional organizations and influences in manpower supply and professional quality is attenuated.

One class of membership does not require limitation to certifying bodies only. In fact, such a limitation would exclude major organizations of allied health personnel from participation. For example, the American Society for Medical Technology does not operate the certification system for its members. The related registry is operated under the aegis of the American Society of Clinical Pathologists. On the other hand, the members of the International Society of Clinical Laboratory Technologists would be represented since the society performs the certification function, as do the American Dietetics Association, the American Occupational Therapy Association and the American Medical Records Association for their members. A third major variant is seen in the independent relationship typified, among others, by the American Association for Respiratory Therapy and the American Registry of Respiratory Therapists.

Final organizational design should make some provision, therefore, for extended membership differentiated by varied functional interests in the credentialing process.

Among the possible devices for representation of members in the decision-making by the Council are the following:

1. General assembly with equal representation by all members
2. General assembly with representation proportional to member organization's size of membership
3. Bicameral general assembly with representation in one house on the basis of size of membership and in the other house on the basis of equal representation for all members

Equal representation/one house:

Advantages	Disadvantages
-- No conflict over relative voting power -- Protects the interest of smaller groups	-- Representation for small groups is equal to that of larger

Proportional representation/one house:

Advantages	Disadvantages
-- Gives greater power to largest groups of allied health manpower	-- Increases the insecurity of smaller occupational groups
	-- Makes more difficult the design of appropriate representation of non-allied health parties-at-interest

Bicameral house (two houses):

Advantages	Disadvantages
-- Gives means of recognizing the different sizes of member constituencies without destroying member equality in the decision process	-- Makes decision-making more time-consuming and complex
-- Increases the alternatives for representation of non-allied health parties-at interest	-- Increases possibility of power bloc formation

A clear consensus developed in support of a single house with equal representation for all members. Throughout the discussion, the rationale for equality appeared to stem from recognition that the role of the Council would be to deal with matters that were of equal weight with all members. These matters are not viewed as related to power as represented by size of members' constituency.

Structural Representation of Other Parties-at-Interest

Numerous organizations or interest groups, other than allied health certifying bodies, would have significant interests in the national certification system. Organizational arrangements for representation of such interests are another major aspect of appropriate structural design for the Council.

Aside from the possibility of different classes of membership, discussed above, there are other alternatives available for consideration:

1. Establishment of advisory committee to represent these interests
2. Provision for election or appointment to membership in the general assembly with full voting rights
3. Provision for election or appointment to membership in the general assembly with limited or no voting rights
4. No representation in general assembly, but representation in membership executive element of organization (such as Board of Directors)
5. No representation

Advisory committee:

Advantages	Disadvantages
-- Provides a channel for input to Council decision-making	-- Severely limits the opportunity for consideration of many valid interests relevant to certification
-- Retains general control of Council within the hands of allied health certifying bodies	

Full voting rights:

Advantages	Disadvantages
-- Gives greater likelihood of effective representation of outside points of view	-- Reduces margin of control by certifying bodies over general decisions
-- Reduces likelihood of criticism as a "closed club"	
-- Increases the motivation for active participation of other parties-at-interest in Council's affairs	

Limited voting rights:

Advantages	Disadvantages
-- Permits participation of outside groups in discussion and other functional activities of the Council without reducing margin of control by allied health certifying bodies	-- Removes some motivation for active participation of other parties-at-interest in the affairs of the Council
-- Reduces likelihood of criticism as "closed club"	

No general representation:

Advantages	Disadvantages
-- Retains general control for those organizations directly involved in certification while providing a means for participation of other parties-at-interest in execution of Council programs	-- Increases likelihood of criticism of the Council as a "closed club"
	-- Denies the Council the advantages of participation of other parties-at-interest in its general deliberations
	-- Increases possibility of conflict with other groups involved in health care delivery
	-- Shifts participation of other groups to a more detailed and internal stage in Council decision-making

No representation:

Advantages	Disadvantages
-- Retains control in hands of allied health certifying bodies	-- Deprives other parties-at-interest of any opportunity to participate in the Council in matters of legitimate concern to them and the public

The relegation of other parties-at-interest to an advisory committee role has been discussed above, in connection with alternatives for classes of membership. Several of the certifying organizations referred to the highly influential role played by adviser representatives of related groups of physicians and dentists. There is persuasive weight to this evidence of cooperation without direct organizational role in decisions.

Important issues were defined in the discussion of public interests in accountability (Chapter 4). Resolution of these issues will require active participation by parties outside the organizations of elements of the medical, dental, and hospital communities. The requisites for cooperative behavior dictate a well-defined relationship between the parties. Our research did not uncover an existing analog upon which to base design of the needed organizational relationship.1/ We were able to develop several rudimentary designs in which differentiated interest groups could be incorporated into a General Assembly with various degrees of participation and voting arrangements. Establishment of the Council as a credible guardian of the public interest would require a more active voice for these parties than would be available as advisers.

Executive Element of Membership Structure

As the size of the Council's membership increases, it would probably be desirable to create an executive element by which the member organizations can perform certain executive functions for which it would

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1/ Among the most adaptable organizational forms investigated by the study team is that of the Engineers Joint Council. Its functions are much broader in scope than those envisioned for a national system for certification of allied health personnel, but the effectiveness of the structure in promoting cooperation between professional organizations in the pursuit of common interests commends it for further study as a possible analog for an advanced stage in the evolution of the Council.

be inappropriate to convene the entire membership. Three alternatives are presented:

1. An executive board (e.g., Board of Directors, Board of Governors, Executive Committee, or Executive Council)
2. Elected President of the Council with grant of executive powers
3. No executive element

Executive board:

Advantages	Disadvantages
-- Increases the degree of member control over Council staff activity	-- Introduces an additional echelon in organizational structure
-- Provides means for continuing decision-making by membership	-- Can cause continuing conflict within the Council staff
-- Permits closer liaison between membership and any employed executive director	-- Requires committee action which may be delayed or difficult to achieve

President with executive powers:

Advantages	Disadvantages
-- Provides a single, clear focal point of executive control	-- Would place great time demands upon the person elected, seriously restricting ability to pursue other activities
-- Reduces internal organizational communication problems	-- Reduces representation of divergent viewpoints
-- Potentially reduces decision time	

No executive element:

Advantages	Disadvantages
-- Reduces number of echelons in the structure	-- Requires stronger executive direction of the Council

-- Provides more direct participation of all members in decisions	-- Probably greatly increases time required to reach operating decisions -- Requires more time of member representatives

The consensus concerning the executive representation of members and the direction of Council activities clearly favored an Executive Board, electing its own Chairman. An attractive proposal for selection of members of the Board calls for rotation of members in the order of the date of Council affiliation. The Board would employ and work through a full-time Executive Director for the Council. The director would exercise day-to-day supervision over the supporting staff and would act for the Board to coordinate various program activities. More detailed definition and evaluation of the Council's administrative structure do not require extensive consideration in order to determine the feasibility of a national system.

The ability of the Council to perform its functions effectively would depend upon availability of adequate staff resources for the permanent and ad hoc working or project groups required. Two major alternatives are open: (1) employment of paid staff specialists; or (2) organization of working groups composed of "volunteer" manpower furnished from the staff or membership of the member organizations of the Council. A combination of these two arrangements is also possible.

Discussion of this problem in the seminars revealed that the member organizations currently are making extensive use of volunteer services of their membership and do not have paid staff available to contribute to the Council's working groups except minimally and irregularly. There was a clear preference for the use of paid Council staff, once past the critical initial organizational phase, to carry the major load in Council projects. Paid staff would be augmented by working group representatives of members to the extent that such help could be recruited and supported.

The Council Option

The concept of a Council of Certifying Organizations was an acceptable one to the majority of those participating in the feedback seminars. Two of the 24 representatives were fundamentally opposed, at the opening of their seminars, to the basic idea of a national system for certification. Their view was that it was not needed and would be unworkable. During ensuing discussion, however, these participants contributed positively to the exploration of the concept as presented in the working papers. Objections to the establishment of a national voluntary system were moderated to some extent, in both cases, as the roles and relationships of possible member organizations were clarified.

Detailed notes were made of seminar discussion for subsequent analysis within the framework of the contextual analysis matrix. In analyzing the discussion, the project team sensed ambivalence about the Council concept. Some representatives definitely expressed support for the Council, seeing it as a device to forestall possible undesirable alternatives. Other participants, whose reaction to the organizational option of a Council did not reach the level of actual opposition, evinced a reluctance to embrace a highly structured and financially costly concept not clearly dictated by a powerful situational imperative. It could be said that most of the participants were willing to join in the project to form a Council, but very few seemed inclined to "snatch up the banner and lead the charge."

The ambivalent reaction of seminar participants required the study team to introduce some materials into the discussion as probes for reactions clarifying, if possible, the sources of reluctance to embrace the Council concept. In order to test the types and intensity of motivation, team members introduced stress questions into the discussion by raising the spectre of governmental control or intervention if the national system organization could not effectively achieve a coordination of certification responsive to the public interest. This stress technique generated some negative feedback when a few participants interpreted it as endorsement by the study team of Federal control. We were able, during the seminars and subsequent meetings, to allay these fears by continued demonstration of the team's dedication to the concept of a voluntary, cooperative basis for any feasible, national system for certification.

The preferred structural characteristics of the Council option were defined during the feedback process. The Council should be incorporated under state laws as a separate, legal entity. It should be a non-profit corporation independent of any affiliation with any existing association or agency. Its one class of membership should not be confined to certifying bodies alone, but should be opened to other organizations who are parties-at-interest in the support, operation, or use of the health care delivery system. All of the members of the Council could have an equal voice in its decisions, but some differentiated functions and limited vote could be provided for the other parties-at-interest. In all events, these other parties who have an interest in the health care system or represent broader public interests in the equity and efficacy of certification should be affiliated with the Council in more than an advisory role.

The Council should create an Executive Board to give continuing direction to the Council's affairs. It should create a paid staff capacity to carry out its functions with working participation of representatives of the member organizations. The staff should be managed by an Executive Director who would act on behalf of the Council and its Executive Committee in carrying out the Council's functions.

Standing Conference Options

If the organization of certifying bodies would limit itself, at the outset, to relatively few high-priority functions which could be carried on without full-time, continuous activities, an appropriate alternative organization form might be a Standing Conference of Certifying Organizations for Allied Health Personnel. The Conference would differ basically from the proposed Council in that it would consist of representatives of the organizations convened periodically on a predetermined schedule (e.g., annually). A set of continuing committees or ad hoc working parties would investigate assigned topics and prepare them for action by the Conference.

We emphasize the continuity of a Standing Conference with continued working groups. We are persuaded that little or nothing would be accomplished by a one-time conference with no provision for sustained effort and, consequently, no capacity to respond to new developments or needs of its constituents. The cooperative relationships and the decision-making capability essential to a successful national voluntary system organization require the time for preparation and deliberation that only continuity can afford.

A Standing Conference is a flexible organizational format. It offers numerous variants ranging from one devoted solely to the exchange of information to a version serving as a forum for defining and adopting a set of principles of good practice, on then to another form with extensive research and program activities approaching those proposed for the Council option. The information exchange version can be rejected as being unresponsive to the needs of a national system for certification. A minimal response to the demands of a system organization would be one that produces an agreed-upon set of principles of good practice.

The Conference option, lacking the machinery of an operating organization, would be best suited to deal with issues of policy; to conduct research on process and policy on which a majority of its member-participants could agree; and to design and prescribe information systems. It could not very well perform operating functions such as some of those proposed for the Council. Nevertheless, this might be less restrictive of its functions than might first appear. The following functions, rated high in importance by our feedback seminars, lend themselves with varying degrees of efficacy to the Conference organizational option:

1. Determine criteria, standards, policies, and roles for certifying systems that are responsive to the needs of an evolving health care delivery system; and aid in their implementation
2. Serve as the agent to advise on standards and processes in the establishment and operation of new certifying systems
3. Research on;
    a. Methods for maintaining competence after initial certification
    b. Methodology of test construction and validation
    c. Cost-saving practices in certification procedures
    d. The interactions of certification and other forms of credentialing

Modes of Operation

The Standing Conference could include designated representatives of certifying organizations as members, with resource people designated by non-member organizations which agreed to participate in an advisory non-voting capacity. Variation in this pattern of membership could be designed to give other parties-at-interest greater degrees of participation and voting rights, as discussed for the Council option.

The Conference would operate in two organizational modes, reflecting its two types of activities: the Plenary Conference, for policy-making and decision-making actions; and the Continuing Committees and Work Groups, for research and preparation of issues for presentation to the Plenary Conference.

The Plenary Conference would meet periodically for several days, by its own determination, with a pre-designated agenda. It would have plenary discretion within the scope of its charter to adopt policies; recommend actions to constituent certifying organizations, other health service organizations, or government; and to instruct its committees or working groups to develop specific subjects or issues for later consideration by the Conference.

Organization of Standing Conference

The Standing Conference should be incorporated under state law in order to acquire essential legal authority to contract, hold property, receive grants, etc. As in the Council option, it should be independent, unaffiliated with any existing association or agency. The Conference would elect its officers and a Steering Committee. The Steering Committee would carry out the instructions between sessions of the Conference, including setting up and overseeing Continuing Committees and Work Groups, and would prepare Conference agenda. The Steering Committee could be supported by a small secretariat, headed by an Executive Secretary, to administer and coordinate the work of the Steering Committee, Continuing Committees, and Work Groups. The Continuing Committees and Work Groups would be composed of designees of member organizations, selected for their technical competence in the several fields to be investigated. Non-member participation could be arranged when the substantive content of a problem required expert assistance or extension of policy interests.

The Continuing Committees and Work Groups could be organized according to subject fields. For example, there could be committees concerned with criteria, standards, and policies for certifying systems; with the certification process and its relationship with other modes of credentialing; with technological dynamics and continuing competence of certified personnel; with relationships among certifying organizations and between them and other components of the health care system; etc.

Financing the Conference

Except for the Secretariat, the personnel for Standing Conference activities would be provided by the member organizations. Members would thus assume directly most of the real cost. On the subjects to be dealt with by Continuing Committees and Work Groups which raise significant issues, member organizations would elect to participate rather than be unrepresented by default. The budget of the Standing Conference would cover the Secretariat, the expenses of meetings, and probably, but not necessarily, the travel expenses of members of Continuing Committees and Work Groups.

Evaluating the Options

The two major options are each feasible. They differ principally on four points:

1. The initial formality of their structure
2. Capacity to accommodate other interests
3. Capacity to undertake program activities and render services to members
4. Fiscal resources required for establishment and operation during initial stages.

Assessment of the relative advantages and disadvantages of each option leads to the conclusion that the Council option offers the maximum potential for realization of a strong, national, voluntary system for certification. The Conference option, on the other hand, offers minimum obstacles to the establishment of a framework in which to initiate the collaboration required for a national, voluntary system. The Conference option would lack, however, some characteristics needed for a durable, stable organization that could sustain effort over extended periods.

In the judgment of the project team, the strongest structure could be provided by the choice of the Council option. Such a goal is the most demanding since it will require more immediate, firm commitment of purpose and resources by all participants. It offers a stable structure with strong machinery for performing the functions defined in Chapter 5. This same stable strength offers greater potential for constructive handling of unanticipated consequences of actions at any stage of the credentialing subsystem. The problems of resolving power relationships between certifying bodies and with other parties-at-interest would be more demanding than in the Conference option. Provision of substantial, stable fiscal support would be a more acute need than in the Conference model if that problem is not grasped and solved promptly.

The fiscal resources and time required to initiate a fully operational Council organization would be larger than those needed for the Conference option. The dynamic forces at work in the health care system call for action without delay to bring responsible order in certification's house. The Conference option offers greater potential for early response for initiating action and achieving initial benefits. The Conference form of organization would not, however, be able to sustain itself and institutionalize effectively with sufficient strength to cope with broadened membership and functions and the unanticipated consequences of actions in credentialing. If the Standing Conference did not evolve into a viable Council form, it would in all likelihood atrophy and become ineffectual.

A strategy for capitalizing on the strengths of both options is possible. By recognizing the need to evolve to the Council form, it is possible to obtain the initial benefits of the Conference option and deliberately plan for the evolution of the stronger organization after launching the national voluntary system through use of a Standing Conference. This strategy would offer a more flexible approach to organizational relationships during the initial stages. The evolving

Conference-to-Council concept would make less direct financial demands than the Council option. It would, however, require significantly higher "hidden" payments by demanding a much greater commitment of "volunteer" manpower by the member organizations. Without this commitment, the research, planning, and administrative functions of the Standing Conference could not be performed. Finally, the demands for volunteer manpower can readily outweigh the apparent advantages of this strategy if the Standing Conference phase is permitted to persist very long.

CHAPTER 7

FINANCIAL PLANNING ALTERNATIVES

Substantial, assured financial support will be required for either form of organization chosen for the national system for certification. The amount required is dictated by the functions selected for active performance by the organization. There are numerous sets of function/time alternatives, each of which dictates a different range of budget level.

Projection of Costs

The exact time and direction of the Council's development would depend in large measure upon the choice of functions and organizational formats discussed in Chapters 5 and 6. There would be, in any case, essentially three stages in organizational development. There is no clear demarcation between the stages. The initial phase would require an executive office charged with providing organizational stability and direction while functioning as organizers, publicists, fund raisers, and organizational representatives. The second phase would be devoted to expanding membership and prestige while assuring effective performance of initial basic Council programs. The third stage would see the Council, now on solid footing, begin to undertake additional programs and responsibilities.

The types of programs and responsibilities to be undertaken can assume many forms. Staffing of the organization would consequently vary widely in terms of the type, quantity, and qualifications needed with consequent present uncertainty of budgetary cost. The Council could simply have a "resident expert" in a functional program area whose duty would be to assemble and coordinate committees or panels dealing with the various areas. Alternatively, the Council could choose to staff an entire department for a functional area and perform services delegated or contracted by members and others.

This spectrum of functions and activities implies an equally varied range of possible budgets the Council would consider. Regardless of the structure the Council could assume, an executive office would be required, and a normal minimal level of administrative and office expenses assumed. Depending upon the number of functional areas the Council undertakes, and the depth of its approach, the members can contemplate financing an office with a minimum of three officers and two secretaries within the first 3 to 5 years, with supplements to these minimums depending on need, success, and available finances.

Several alternative budgets were postulated during the analysis phase to provide benchmarks for assessing economic feasibility of a national system. Total estimated costs for operation of an established Council ranged from $70,000 up to $300,000 per year. Costs depend most significantly upon the breadth and depth of program-oriented workload and the resultant size of paid program staff.

No unusual items are needed in the budget. The types of expenditures are typical of existing professional and non-profit organizations. In view of the typical nature of the budget structure and the futility of projecting definitive expenditure estimates, no specific expenditure budget is submitted in this report for either the Council or Committee options.

In constructing the budget, serious consideration should be given to the tradeoff between expenditures and productivity. Increasing the rate of growth, which includes taking on additional staff, functions, and responsibilities, increases the total cost over the period of expansion when compared with a slower plan for reaching full functional coverage. However, the additional cost would allow the Council to deliver full services to its members more quickly. Experimentally, hypothetical alternate growth plans were assumed for periods of 5 and 8 years to reach the same level of full operations. Time-phasing to full functional capacity within 5 years, and operating at that level for 3 years (a total of 8 years) was 20 percent more expensive, in total cumulative expense, than a plan calling for more gradual growth extending over the 8-year period. However, in the 8th year alone, the operating expenses predicted were only 5 percent higher for the organization that had matured in its 5th year than for the same 8th year under a plan maturing in that 8th year -- a marginally higher cost for significantly greater functional capacity.

It is clear from our examination of the expense budget alternatives that the major influence upon fiscal feasibility of a national system is the capacity to generate and maintain stable sources of income. Contextual analysis of interview responses led to a cautious approach in the feedback seminars in defining and appraising the capacity of various income sources.

There are four major prospective sources of funds for the Council:

1. Membership fees
2. Grants
3. Endowment
4. Contracts and revenue-producing services.

First, it is reasonable to expect that a membership fee and dues structure could be established. The fees should distinguish between regular and associate member organizations. Dues could be assessed by some combination of a flat fee and a sliding-scale according to membership size and certification activity. A portion of these fees could be derived from allied health personnel in the fees for certification.

A second source of funds exists in operating grants available from the Federal Government, foundations, and interested parties. The AMA, ADA, and AHA, representing primary users of allied health personnel, definitely could benefit from Council effectiveness. Their ability to rely upon the Council for many matters now directly funded in their own programs could be the basis for shifting some of their resources to share support of the Council.

Philanthropic individuals and organizations could be solicited for endowments, a third major possibility for funds, particularly for capital expense.

Fourth, in view of the extensive list of possible functions, we postulated several types of services that the Council could offer on a fee basis to the constituent organizations and in some instances to state and local governments or individuals. Among the revenue-producing services that could be offered are: services to the states on a contractual basis to act in support of their licensure functions, perhaps on a fee-per-case basis; centralized scheduling and administration of certifying examinations; staging training seminars and equipment shows or skill display conventions. In addition, there are services the Council could offer its constituent organizations that represent savings to the latter by economies of scale. These might include: consolidated billing and contract administration, i.e., for printing or computer support; maintenance of a central data bank, centralized publications, and perhaps registry operations as well, under one roof; and other common administrative and clerical support services.

A time-phased income budget showing the proportion projected from each of four major sources was presented in the feedback sessions (Figure 6). Assuming a likely rate of growth of the various sources of income as the Council grew to its full functional capacity, the chart below expressed our expectations about the proportions of Council funds the various sources of income could provide, expressed as percentages of total revenue in each year.

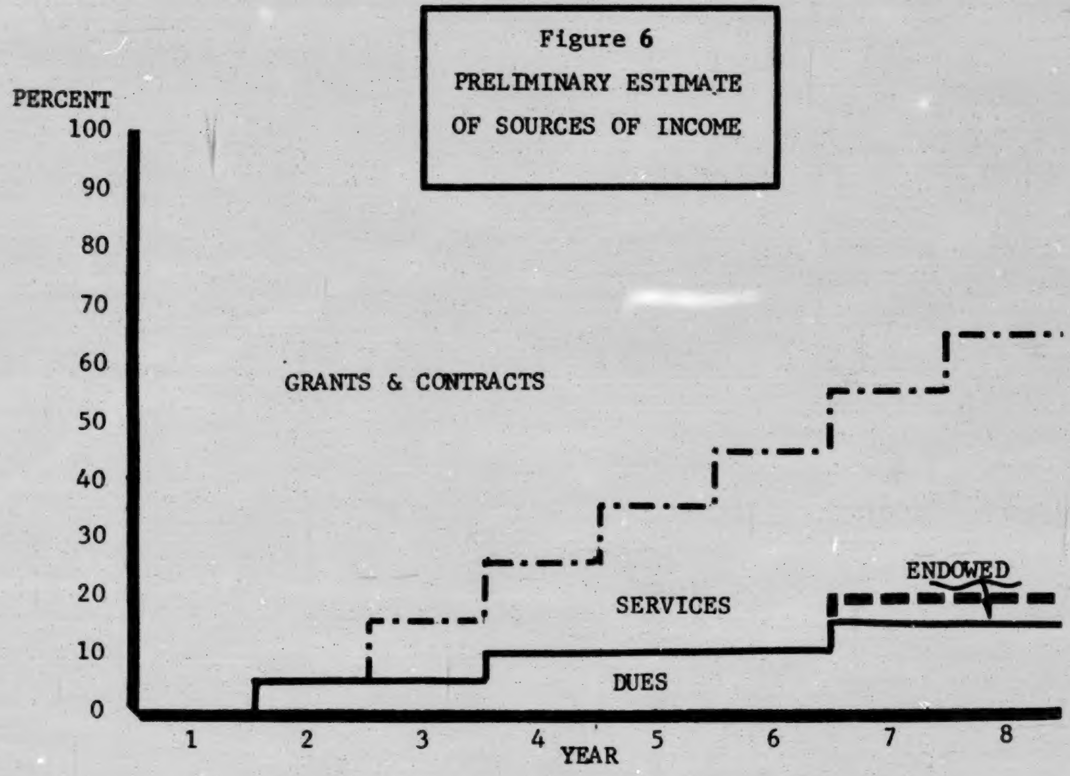

Figure 6
PRELIMINARY ESTIMATE
OF SOURCES OF INCOME

Figure 6 shows grants and contracts as the major sources during the early years with fees for services to member organizations expanding in later years. Membership fees and endowed income remained a relatively small portion of the support.

This conservative preliminary budget was severely criticized by all seminar groups as too "soft." Its heavy reliance upon grants and contracts, at least 45 percent, instead of fees and assessments upon the constituents of the system organization was seen as leaving the organization vulnerable to outside influences. Revenue-producing services were also viewed pessimistically. The functions which would produce such revenue ranked low in importance by seminar participants (see Appendix 4).

There was substantial support for a financial plan based more heavily upon fees linked to the number of certified persons on record and for each certificate issued. Opinions strongly urging such a plan were widely expressed in the seminars. If the opinions expressed during the discussion are truly indicative of possible official action by member organizations there is, indeed, a firm base for income derived directly from certification activity. Based upon 1970 data, the most recent complete year available, the certifying bodies participating in the study would generate an estimated annual income in excess of $40,000 on a fee schedule of 10¢ for each certificate outstanding and $1 for each new certificate issued -- a minimal level assumed to test the viability of this income source. Doubling the 10¢ charge would produce additional income exceeding $20,000, while an increase to $2 per certificate would generate an equal additional amount giving a total annual income of at least $80,000.

Sufficiently credible sources of income emerged during the seminars and subsequent analysis to support the conclusion that a national voluntary system would be economically feasible if it received some form of grant from government or other sources during its formative period of 2 to 3 years.

During the seminars, the project team eschewed the role of advocate for any functions or source of revenue, choosing rather to assure only that none were overlooked or misconstrued. No attempt was made, therefore, to persuade participants to increase emphasis on revenue-producing functions. Lack of awareness of revenue potential in specific activities and some possible hesitance to compromise their organizations' sources of revenue could have contributed to the low relative evaluation of this income source. The major reason is, however, a conviction that the Council should not be engaged in "extraneous activity" to produce revenue.

We did pull one revenue source out for more detailed discussion in some seminars. The possibility of a useful collaboration between the Council and the various state licensing agencies offers both the opportunity for increased effectiveness of the credentialing subsystem and an attractive source of revenue directly related to certification. Contracts with state licensing agencies to establish certifying examinations as a basis for licensing would be legally permissible if the Council limited its service to the provision of written or oral examination scores upon which the licensing agency would then exercise its non-delegable, legal discretionary power to license. Two-tier scoring, one level for licensing, with possibly a second, higher level for certification, could be designed if licensing and certifying standards continue to differ. Other problems in designing such a service for state and local agencies, such as effective collaboration with existing examining services, would probably be equally soluble. Thus, this possible revenue source should receive early study by the Council when established.

Possible grant support by existing health-related associations (e.g., AMA, AHA, ADA, etc.) was discussed specifically in all seminars. The attitudes of participants from these organizations toward the idea were objective to such a degree that this remains a significant potential source of revenue. Relatively modest grants would make a major contribution to the fiscal stability of the Council. Fears, by a few of the potential Council members, that such grants could lead to domination of the Council must be viewed in balance with the countervailing posture of representatives of these major associations -- one of apparent reliance upon channels of professional influence to achieve acceptable recognition of their organizations' legitimate interests.

Contractual or grant support for direct research activities covered by Council functions would directly contribute to program staff and administrative costs. Management and supervision of programs of manpower-related research could be undertaken much as is done by the Federation of American Societies for Experimental Biology on behalf of its member societies. Resulting production of fee income and the wider distribution of Council overhead expense could further increase fiscal resources. For direct research, contractual activity of about $40,000 to $50,000 would support 1 man-year of program staff costs. Until its initial phase of growth is completed, a Council should use contract research as part-time support of staff rather than as a full-time activity.

Endowment income was considered, at best, a remote possibility. Sources would be difficult to find and competition would be very strong. Gifts from foundations, individuals and health-related industrial donors could be exploited to create an endowment fund. Charitable and educational institutions are avidly seeking gifts from these same sources. Financial planning for the support of the Council must take cognizance of the fact that a fund of $250,000 to $300,000 could produce a stable income of between $15,000 and $25,000 per year under conservative investment policies. This amount would be a significant contribution to the Council's budget.

The cumulative estimate of the potential productivity of the various types of income sources is shown in Table 3. These estimates are presented on the assumption that certifying bodies, professional societies, and other parties-at-interest can recognize their stake in achieving a credible national system for certification and will make the necessary commitments to support the system's organization. Table 3 represents moderately optimistic estimates of the potential that

Table 3

Estimated Range of Income Potential from Major Sources

(Thousands of Dollars)

	Annual potential ($000)	
	Low	High
Member fees	40	80
Contract support of research	40	100
Sustaining grants	15	30
Founding grants (3 year)	50	50
	145	260

should be vigorously exploited in the creation of the Council or Conference.

When the estimates of income potential are compared with the range of cost estimates cited above in this chapter, $70,000 to $300,000, it appears reasonable to conclude that minimum support level could be satisfied rather readily and that moderate success in expanding income from the major sources would permit at least the minimum rate of growth to maintain system viability.

CHAPTER 8

ACTION RECOMMENDATIONS

Action beyond establishing analytically the feasibility of a national voluntary system is required if the concept is to be given substance. The course of events initiated by commissioning of this feasibility study can hardly be concluded until some impetus is given to the realization of the concept.

Two feasible system options have been identified and evaluated. The long-run advantages of the Council of Certifying Organizations are substantially greater than the Standing Conference option offers, but either can be used as the structure for developing a national voluntary system for certification. A significant number of issues remains to be resolved before formal establishment of the national system organization can take place. An extensive agenda for action is easily perceived for the fledgling organization.

A major goal of the interviews and feedback seminars was to identify the substantial areas of agreement and difference among the various professional groups on salient features of concepts for a national system of certification and its governing body. Apparent differences were used as the base for innovative refinement of the organizational design where that was needed to broaden the area of agreement. The study project is not the proper vehicle, however, for entering into negotiations with differing groups to bargain over conflicts beyond the point needed to establish the existence of a feasible system model Now that a viable model has been defined, any remaining issues constitute a possible agenda for resolution by the agents responsible for the creation and activation of the national system. What, then, are the next steps to be taken?

Implementing Strategies

Several strategic alternatives exist among the various courses open to the Department of Health, Education, and Welfare:

1. Publication of the study report leaving the taking of further action to the initiative of one or more health-related organizations
2. Convene an organizing conference of certifying bodies to consider the content of this report and develop a response to its recommendations
3. Convene an invitational work group of representative selected certifying bodies to consider the content of this report and develop the organizational structure for initiating the national system
4. By a grant to an appropriate disinterested institution, provide staff support during the detailed planning and organizational phase
5. A combination of either #2 or #3 above with #4.

The first alternative is the least attractive of the strategies listed. Despite the positive interest evinced by some organizations, there is a definite possibility that some of the momentum generated during the study would be dissipated by time delays and the abrupt shift of locus of energy. Further, official sponsorship could create a setting more conducive to public acceptance of the resulting actions avoiding, as it must, the appearance of conflicts of interest, protectionism, or domination.

Convening an organizing conference would provide positive impetus to further extension of the national system concept. The constituency developed during participation in this study would be directly linked to future action. The certifying bodies, and other groups not included in the study, which indicated an interest in collaborating in improvement of credentialing could be phased into the necessary planning and implementation. When presented with a definite concept, leadership could emerge among the potential members. Collaboration required during staff work preliminary to the conference could produce mutual perceptions of common objectives among the allied health community.

On the other hand, convening such a conference without preliminary consultation and planning would be quite unwise. Attempting to develop agreement to establish a national system and define the myriad necessary actions to create and activate the required organization is a major task under the most favorable conditions. The difficulty of such a task would be compounded if undertaken directly through a plenary conference.

The probability of success in these formative actions could be significantly increased by the adoption of a strategy that would invite a working group of representatives of selected allied health certifying bodies to prepare a prototype plan for the system and its organization. This group should consist of persons representing organizations favorably committed to the establishment of the system. The plan developed by this planning workshop would then be presented by its members to the potential members of the system organization for consideration, revision, and adoption.

The need to keep the work group small could cause resentment in the organizations not invited to participate. Using work group members as liaison with other organizations during the studies and preparation of working papers, etc., could alleviate a part of this possible difficulty. The advantages of greater speed of action and more clearly focused deliberations in the subsequent consideration of the proposed plan of organization outweigh by far the possible risk of unfavorable reaction.

A fourth strategy calls for the activation of a staff secretariat to undertake continuing negotiation between possible interested organizations and definition and resolution of issues. These actions would be designed to produce a plan of organization and charter of incorporation around which the actual Council or Conference would be formed. The secretariat would need to come from an independent, disinterested institution in order to reassure all potential members that the system organization was free from dominating control by special interests. Support for the work of the secretariat could be provided by a grant, possibly from the Department of Health, Education, and Welfare.

An adequately and independently funded staff secretariat serving the organizing group will be able to aid materially in resolving possible conflicting views between participating organizations. Its contribution of objective analysis of issues and the definition of options for their resolution should increase the likelihood of progress in developing an acceptable structure, organizational objectives and adequate financial support.

Without substantial participation by the interested organizations, the secretariat would be restricted in its effectiveness. A strategy that combines a secretariat with either the organizing conference or the invitational work group achieves the advantages of voluntary participation by potential membership and the availability of directed staff assistance in negotiation, analysis, and administration. Under this strategy, the funding of the secretariat could cover the expense of conducting the organizing meetings and administrative costs of formally establishing the system organization.

The project team recognizes fully the value of the maximum of participation by all possible parties-at-interest. We are equally mindful that the problems of organization and implementation of a national system structure are compounded greatly by the political issues inherent in attempts to conduct deliberations in large assemblies containing competing and divergent interests. Debate and full discussion can provide light but they can also obscure and distort the vision. Objective analysis and search for agreement can be equally illuminating.

The participation of parties-at-interest in this study and in other professional activities relevant to certification and other forms of credentialing has definitely created a constituency for the concept of collaboration in the establishment and maintenance of a national voluntary system for certification. It now remains to organize the framework within which that collaboration can take place and to initiate the cooperative activity needed to activate that framework. When a viable format has been designed it will be necessary to develop an operational constituency for the national system; a constituency that will have identified a common set of values and benefits, relevant to the public and to the profession, which can best be obtained through continued support of the national certification system.

Recommended Actions

The role of the Department of Health, Education, and Welfare, at this time, should be to provide the means and environment by which the feasible concept of a national voluntary system for certification can be transplanted from an intellectual stage to the real world of occupational and professional affairs. That environment must be one in which the transplanted idea has a reasonable chance to acclimate itself to the real world and to survive or to die on the basis of its own inherent strengths and weaknesses. The "next steps" to be taken by the Department to bring a national voluntary system for certification of allied health personnel into being should be limited to providing an environment in which the concept can take root, encouraging those organizations who desire to participate, and limited financial support by "seed money" during the organizational state.

The most effective option for implementing the recommendations of this study would consist of governmental support of a small interim secretariat to assist in planning, organizing, and conducting an invitational working conference to develop detailed specifications for the organization required for a national voluntary system for certification. Wider participation would be provided by the continuing use of the feedback seminar format as the primary channel of communication between the working group and the broader constituency of certifying bodies and other parties-at-interest. At a suitable time, a constituent assembly of the broader group of organizations would be convened to respond to the proposed organizational plan and to complete the establishment of the system organization. The secretariat would cease to function as soon as the organization is formally created and the initial organization and staffing have been accomplished.

This series of actions would demonstrate continued public concern and support for the concept of credentialing by certification. By keeping the support activities in the hands of a non-governmental institution, the voluntary, non-Federal nature of the system to be designed would not be placed in jeopardy. Further, it would permit organizational members of the invitational working conference to concentrate their resources upon programmatic rather than organizational and financial concerns during the start-up phase. The result would be an orderly shift of the center of concern from the Department to an institutionalized focal point within the allied health field.

This strategy would do much to assure that all certifying bodies would be able to participate in the fledgling system and organization with confidence that the influence of relative size, age, or prestige of occupations or organizations would not dominate the organizational process.

We conclude, therefore, with the recommendation that the Secretary of Health, Education and Welfare initiate implementation of a national voluntary system for certification of allied health personnel.

Appendix

1. Interview Guide and Initial Correspondence
2. List of Participating Organizations
3. List of Possible Functions and Derivation of Rankings
4. Function Rating Worksheet
5. A Statement of a Possible Future of the Health Care Delivery System
6. Glossary of Abbreviations
7. Bibliography

Appendix 1

a. Interview Guide

b. Introductory letters

c. NIH Press Release

INSTITUTE OF PUBLIC ADMINISTRATION

FEASIBILITY STUDY FOR NATIONAL CERTIFICATION SYSTEM

INTERVIEW GUIDE

The descriptions of situations appearing on the following pages have been prepared to give a common set of problems around which to conduct interviews during this phase of the study. They represent possible situations which may confront professional associations and registries in the allied health occupations. There are no right or wrong answers.

The following three questions should be discussed in reference to each situation:

1. HOW WOULD YOU BECOME AWARE OF THIS SITUATION WERE IT TO EXIST? (Not always necessary to answer this question.)
2. ON WHAT PREMISES WOULD YOU EVALUATE THE SIGNIFICANCE OF THE SITUATION TO YOUR ORGANIZATION AND PROFESSION?
3. WHAT FACTORS WOULD YOU CONSIDER IN ASSESSING YOUR ORGANIZATION'S ROLE AND THE ROLES OF OTHER ORGANIZATIONS IN DEALING WITH THE SITUATION DESCRIBED?

Specific responses given during the interview will not be identified in any way in the study report as coming from any individual or organization.

3-22-73

1. You have been asked to present to your board an analysis of the current and future manpower situation for your profession, considering such factors as estimated demand for employment, current employment level, numbers of persons certified, enrollment in accredited programs, and projections of these data over the next five years.

2. There has been a rapid change in the type and complexity of equipment necessary to perform the duties of your profession. The equipment has become available and is being specified in the equipment lists for new hospitals and clinics. It is now too expensive for use in individual physician's offices or group medical practice. Many of your members do not have the necessary training and experience to operate the equipment.

3. A system of national health insurance covering comprehensive hospital, medical, and dental care has been adopted by the Congress and signed by the President.

4. After an exposé in a large metropolitan daily of the quality of manpower used in many health facilities, a major consumer interest group has announced that it intends to obtain introduction of legislation into the state legislature requiring mandatory licensing of all categories of personnel working in hospitals, clinics, or physicians' offices.

5. Some recent state court decisions have held hospitals totally and separably responsible and liable for the consequences of the professional performance of all persons permitted to perform their duties within the hospital. This establishes an additional source of accountability for the performance of professional duties, particularly of allied health personnel.

6. The American Federation of State, County and Municipal Employees local has called its members out on strike against the hospitals of the city. One of their principal demands is for restructuring of jobs to provide for career ladders that will give previously "disadvantaged" persons opportunities to learn on-the-job and advance by examination to higher position levels. If this demand is satisfied, it will require a major revision of the occupational structure for your association members employed in the municipal hospitals.

7. A proficiency examination has been developed for use under the provisions of HR 1. Persons from your profession participated in the development of the examination.

    (a) Complaints continue to be received that state licensing agencies have refused to accept the examination in lieu of education and experience requirements or their own examination in meeting requirements for licensure.

(b) The policy decision on the acceptance of the test as a qualification for certification is under consideration by your organization's governing board, which has asked for your recommendations.

8. Two events may indicate trends toward a major change, in the future, in the possible role of certification in the credentialing of allied health personnel:

(a) State legislatures are considering legislation that requires the designation of representatives of the public to serve on every state licensing body.

(b) Physical therapists, for example, have now been covered by licensing laws in every state, and the registry and certification activity for the physical therapy occupation has now been closed.

9. Proficiency examinations and equivalency tests for required courses by members of your association (or registry) are to be used after January 1, 1975. The costs of certification activities have become burdensome to your organization. There are some blocks of knowledge and skills common for your profession and others in the allied health field.

10. Research laboratory success has been reported for the use of proton beam scanning for the radiographic discrimination of malignant tissue and the mapping of tumors contained, for example, within the brain. Similar technological advances could occur in other professional fields.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
NATIONAL INSTITUTES OF HEALTH
BETHESDA, MARYLAND 20014

BUREAU OF HEALTH MANPOWER EDUCATION

March 12, 1973

[illegible] Director
[illegible] Association
[illegible]
[illegible] 11

Dear M[illegible]:

Improvement of the system for credentialing of allied health manpower continues to be a high priority goal of the Division of Allied Health Manpower of the National Institutes of Health. The system for certification of health professionals was specifically covered in the Secretary's Departmental Action 4 in his June 1971 Report to Congress on Licensure and Related Health Personnel Credentialing.

Previous discussions of the credentialing process, in the September 1971 Conference and in the SASHEP Commission Reports, clearly indicate the preferability of improvement through actions by the professional associations and registries. In order to explore further this avenue to improvement, the National Institutes of Health has contracted with the Institute of Public Administration for a study of the feasibility of a national voluntary system for increasing the effectiveness of the certification system. The report of the study, to be submitted in late 1973, will give all of us a clearer concept of what we can and should do in working together toward increased coordination and responsiveness in certification policies and practices.

The accompanying letter from the Project Director, Mr. Eldon E. Sweezy, gives further information about the study approach. We would appreciate your cooperation with the study team as they search for feasible objectives and means for joint action.

In order to have the study completed within a relatively short time period, we have selected eight health fields and designated those occupations to which the contractor should direct his attention.

Health Field	Occupation
Clinical laboratory services	Medical technologist Medical laboratory technician Cytotechnologist Histologic technician Laboratory assistant
Dental allied services	Dental assistant Dental laboratory technician
Dietetic and nutritional services	Dietitian Dietetic technician-assistant
Inhalation (respiratory) therapist	Inhalation therapist Inhalation therapy technician
Medical records	Medical record administrator Medical record technician
Occupational therapy	Occupational therapist Occupational therapy assistant
Assistance to physicians	Physician assistant (generalist)
Radiologic technology	Radiologic technologist-technician

Obviously we do not mean to exclude other health fields on whom the certification system would also have impact. They are welcome to participate within the framework of the time and money available to the contractor.

We are counting on your cooperation in this important project.

Sincerely yours,

Thomas D. Hatch
Director
Division of Allied Health Manpower

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INSTITUTE OF PUBLIC ADMINISTRATION

1619 MASSACHUSETTS AVENUE, N.W. • WASHINGTON, D.C. • 202-667-6551 CABLE: "INSTADMIN"

LYLE C. FITCH, PRESIDENT

March 12, 1973

Mr. [illegible] Director
[illegible] of [illegible]
[illegible] Avenue
Chicago, Illinois [illegible]

Dear [illegible]:

The National Institutes of Health has recently awarded a contract to the Institute of Public Administration to conduct a study of the feasibility of establishing a national, voluntary (non-Federal) system for increasing the effectiveness of certification for allied health professions. This study was recommended by the Secretary of Health, Education, and Welfare in his June 1971 report to the Congress and was brought to the attention of the professional community at the certification conference in September 1971.

The Institute of Public Administration is the oldest institution in the United States devoted exclusively to education, analysis, and service in the field of public affairs. Since its founding in 1906, it has developed an international reputation for comprehensive, objective analysis and advisory services by permanent and associated staff of experienced personnel.

We have been joined in this study by Robert R. Nathan Associates, an economic consulting firm with wide-ranging experience whose recent work in the health field includes projections of health manpower requirements, an analysis of the impact of Medicare methods of reimbursement, and studies of health manpower development and utilization.

Conduct of the study will require our continued contact with organizations that have a direct interest in developing and utilizing allied health manpower. It is only by such contact and collaboration that we will be able to focus on the real issues involved in assessing the feasibility of such a national, voluntary system and the design of a workable structure for the organization required to operate the system if it is deemed to be feasible. The study plan, therefore, calls for an intensive interview phase to explore the critical aspects of the problem with professional associations and registries involved in the eight health fields specified by NIH. Analysis of interview results will be followed by a series of feedback seminars, with representatives of these same groups, in which we will consider the relative feasibility of alternates for design and implementation of the system and its organization.

The study has been specifically designed to avoid the premature assumption of feasibility or imposition of a preconceived organizational

TRUSTEES: LUTHER GULICK, CHAIRMAN RICHARD S. CHILDS, VICE CHAIRMAN JOHN S. LINEN, TREASURER FRANCIS W. H. ADAMS

solution to the problem. We have chosen an analytical approach that will aid us in seeing the certification function in its surrounding situation or context. To obtain a broad and objective picture of the situation, we will be using an interview format based upon a series of "critical situations" which describe possible problem events or circumstances to which the certification system may need to react.

In collaboration with the NIH, we have identified the professional organizations directly involved in the eight health occupational fields specified in our contract. The American Society of [illegible] [illegible] is among these crucial groups from whom we need to obtain basic information and subsequent assistance in the consideration of alternative characteristics of the system and its organization. We would, therefore, appreciate your assistance in the scheduling of interviews with key personnel in your organization at an early date. Experienced analysts in our project team will then visit your headquarters, or any other specified location, to conduct individual interviews with each of the one to four key officials who can contribute most directly to our development of an accurate, comprehensive picture of the certification process and the dynamic situation that surrounds and influences it. We believe that each interview will require about 1-1/2 to 2 hours, but we are willing to take as much additional time as you believe necessary to give a useful response. Prior to the interviews, we will send a copy of the "critical situation" statements around which the discussion will be focused so that each person to be interviewed can give prior thought to significant aspects of the problem.

Scheduling of our travel to fit the time available in your own schedules will require some negotiation. I will, therefore, contact you by telephone between March 12 and 16 to work out the timing of our visit to Chicago. Since we plan to complete the interviewing by April 14, 1973, we should appreciate the most compact scheduling of interviews consistent with your availability.

I will gladly answer any questions you may have concerning our objectives and plan for the study at any time during the course of the project. You may write or may call me on 202-667-6551 (extension 43).

Sincerely yours,

Eldon E. Sweezy
Project Director

EES:kgh

HEW NEWS RELEASE

NATIONAL INSTITUTES OF HEALTH

Appendix 1c

Bethesda, Maryland 20014

Bureau of Health Manpower Education
Division of Allied Health Manpower

Laura Mae Kress
Office: 301 496-5655
Home: 703 532-1944

FOR RELEASE IN A.M. PAPERS
Monday, February 26, 1973

The feasibility of establishing a national system of certification for health personnel will be explored through a contract announced today by Kenneth M. Endicott, M.D., Director, Bureau of Health Manpower Education, a component of HEW's National Institutes of Health.

The study, called for in the Secretary's June 1971 Report on Licensure and Related Health Personnel Credentialing, will be conducted by the Institute of Public Administration, Washington, D.C., with the professional collaboration of Robert R. Nathan Associates.

A "national system of certification" is conceived as an umbrella system at the national (not Federal) level which could provide coordination and direction of certification practices for selected health occupations through voluntary participation. Among the functions such a system might provide are: establishing common certification policies and practices; determining desirability of extending certification to new occupational groups and specialties; carrying out studies and recommending ways to improve such operations as examination development, administration, and financing; serving as a resource for individual certifying agencies, and providing a bridge for coordination with accreditation and licensure practices.

-more-

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
National Institutes of Health

General direction for the study will be provided by the Division of Allied Health Manpower in the Bureau. Thomas D. Hatch, Division Director, and project officer said, "Allied health occupations certification practices are complex and uncoordinated. We have asked the Institute of Public Administration to examine existing practices for selected allied health fields and to determine if a national certification system is feasible. If the findings indicate that it is, the Institute will make recommendations as to the organization and composition of such a system and the steps that should be taken to establish it."

The principal fields to be addressed in the study are: clinical laboratory services, dental allied services, dietetic and nutritional services, inhalation (respiratory) therapy, medical records, occupational therapy, physician assistance, and radiologic technology.

Maryland Y. Pennell, Chief, Office of Special Studies, Division of Allied Health Manpower, and co-project officer, commented on the work plans for the study. She said, "The Institute of Public Administration, through the project director, Eldon E. Sweezy, will work closely with the allied health professional groups to obtain their reactions to the design and operation of such a national certification system. In addition, small working groups may be convened to address specific issues."

It is anticipated that the study will be completed before the end of 1973. The total cost of the contract will be $149,000.

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Appendix 2

LIST OF ORGANIZATIONS

INCLUDING GLOSSARY OF ABBREVIATIONS

Glossary of Abbreviations

ADA	American Dental Association
AHA	American Hospital Association
AMA	American Medical Association
DHEW	Department of Health, Education and Welfare
HMO	Health Maintenance Organization
NBME	National Board of Medical Examiners
PSRO	Professional Standards Review Organization
SASHEP	Study of Accreditation of Selected Health Educational Programs

LIST OF ORGANIZATIONS

The following organizations were included in the interview phase and were invited to participate in the feedback seminars.

1. Accrediting Bureau of Medical Laboratory Schools
2. American Academy of Physicians Assistants
3. American Association of Physicians Assistants
4. American Association for Respiratory Therapy
5. American College of Radiology, Commission on Technologist Affairs
6. American Dental Assistants Association
7. American Dental Association
8. American Dental Hygienists' Association
9. American Dietetic Association
10. American Hospital Association
11. American Medical Association
12. American Medical Record Association
13. American Medical Technologists
14. American Occupational Therapy Association
15. American Radiography Technologists
16. American Registry of Physicians' Associates
17. American Registry of Radiologic Technologists
18. American Society of Clinical Pathologists
19. American Society of Cytology
20. American Society for Medical Technology

21. American Society of Radiologic Technologists
22. International Society of Clinical Laboratory Technologists
23. National Association of Dental Laboratories
24. National Board for Certification in Dental Laboratory Technology
25. National Board of Medical Examiners
26. Board of Registry of Medical Technologists

Appendix 3

List of Possible Functions

Comprehensive Set of Possible Functions

1. Establish standards for certifying bodies
    - 1.1 Evaluate the need for certification of new specialties or new occupations
    - 1.2 Determine criteria standards, policies, and roles for certifying systems that are responsive to the needs of an evolving health care delivery system; and aid in their implementation
    - 1.3 Serve as the agent to advise on standards and processes in the establishment and operation of new certifying systems

2. Determine certification norms
    - 2.1 Provide a structure within which the member organizations and other parties at interest can review and coordinate initial and continuing certification requirements
    - 2.2 Study the interoccupational comparability of standards for continuing education and training between occupations having common bodies of knowledge and skill related to certification qualifications
    - 2.3 Assist in preparation of definitive standards of competence for each allied health category

3. Conduct research
    - 3.1 Study the effect of certification upon lateral, lattice and upward career mobility in a technologically dynamic environment
    - 3.2 Conduct research on the dynamics of allied health occupations:
        - 3.2.1 Longitudinal studies of allied health careers -- qualifications, experience, job structure, employer type, ...
        - 3.2.2 Methods for maintaining competence after initial certification
        - 3.2.3 Problems involved in cross-qualification, cross-training, and cross-placement
    - 3.3 Conduct research on certification process
        - 3.3.1 Methodology of test construction and validation
        - 3.3.2 Cost saving practices in certification procedures
    - 3.4 Conduct research on allied health manpower problems such as:
        - 3.4.1 Occupational supply imbalances
        - 3.4.2 Geographic maldistributions
        - 3.4.3 Projection of future manpower supply and demand
        - 3.4.4 Effective utilization of manpower qualifications
        - 3.4.5 Incentives to more optimal geographic distribution of health personnel

  - 3.5 Collect and analyze information regarding new technology affecting the occupational structure and certification standards for allied health personnel
  - 3.6 Analyze the effect of specialized health care delivery units upon certification requirements
  - 3.7 Study the interactions of certification and other forms of credentialing

4. Collect and disseminate information
   - 4.1 Compile regional and national data on current supply, demand, and salary levels for allied health personnel:
     - 4.1.1 By occupation
     - 4.1.2 By level within occupation
     - 4.1.3 By location
     - 4.1.4 By type of employment situation
   - 4.2 Maintain a data bank linked to other data banks
   - 4.3 Serve as a clearinghouse for technological information releases

5. Mediate or adjudicate interoccupational and other differences
   - 5.1 Serve as a forum for resolving differences among members pertaining to policy or procedural matters
   - 5.2 Mediate differences arising from the need to certify new professions or subspecialties with cross-disciplinary characteristics

6. Encourage cooperation and joint activities
   - 6.1 Coordinate the development of joint examination programs
   - 6.2 Participate in coordinated recruiting programs for allied health manpower by providing information on:
     - 6.2.1 Certification standards
     - 6.2.2 Occupation and specialty definitions
     - 6.2.3 Projected manpower data

7. Perform public relations and representation roles
   - 7.1 Serve as an organized interface for the certifying organizations on joint matters with the National Committee on Accrediting, Joint Committee on Accrediting of Hospitals, U.S. Health Resources Administration, U.S. Social Security Administration, Association of American Medical Colleges, Association of Schools of Allied Health Professions, and state licensure bodies.

- 7.2 Serve as a common communications arm to the various legislative and administrative government agencies which have an effect upon certification. Among the pertinent issues that are included in such a function are: (a) image creation for the public, showing allied health personnel as being worthy of the public's confidence; (b) representation of allied health manpower in considerations of the public issues; (c) recognition of the public interests in allied health competence, as reflected in certification, and translation into policy guidance for constituent members.
- 7.3 Recruit new member organizations.

8. Provide common administrative services
    - 8.1 Establish or operate a clearinghouse for central qualification information on individuals certified, either as
        - 8.1.1 A service to individual registries, not as a competitor
        - 8.1.2 As a consolidated replacement of current registries
    - 8.2 Act as a central fund-raiser for certification programs, or as an advisor, notifying member organizations of the existence of funds and the best means of soliciting them
    - 8.3 Provide such day-to-day services of a fiscal-clerical nature. These functions may include centralized:
        - 8.3.1 Office staffing
        - 8.3.2 Data processing
        - 8.3.3 Projected manpower data
        - 8.3.4 Systems design and analysis
    - 8.4 Provide the organizational framework for services to member organizations in their programs for maintenance of competence of certified persons -- their continuing education and evaluation thereof. The Council could serve any individual organization or combination of them, as by occupational type; or all member organizations. These services may include:
        - 8.4.1 Administration of established programs for continuing education
        - 8.4.2 Analysis and identification of specific needs in these programs
        - 8.4.3 Development of curriculum material
        - 8.4.4 Development of testing methods and materials
    - 8.5 Development and overseeing of common test administration services

Appendix 4

a. Function Rating Worksheet

b. Rank Order of Perceived Importance of Possible Functions

c. Description of methodology for derivation rankings

RATING WORKSHEET

In the two columns below (on the right) record the degree to which you believe each of the possible functions listed below has value and can be performed by a national system:

In Column (A) the relative degree of importance of the function
In Column (B) the likelihood of successful performance of the function

[illegible]ign a value (by circling) of 1 to express the lowest level of rating you would actually assign. Use 6 [illegible] the highest rating you would assign. Use 2,3,4 or 5 to express relative degrees between these extremes.

Column A Importance	Function	Column B Performance
	I. Establish standards for certifying bodies	
1 2 3 4 5 6	1) Evaluate the need for certification of new specialties or new occupations	1 2 3 4 5 6
1 2 3 4 5 6	2) Determine criteria standards, policies, and roles for certifying systems that are responsive to the needs of an evolving health care delivery system; and aid in their implementation	1 2 3 4 5 6
1 2 3 4 5 6	3) Serve as the agent to advise on standards and processes in the establishment and operation of new certifying systems	1 2 3 4 5 6
	II. Determine certification norms	
1 2 3 4 5 6	1) Provide a structure within which the member organizations and other parties at interest can review and coordinate initial and continuing certification requirements	1 2 3 4 5 6
1 2 3 4 5 6	2) Study the interoccupational comparability of standards for continuing education and training between occupations having common bodies of knowledge and skill related to certification qualifications	1 2 3 4 5 6
1 2 3 4 5 6	3) Assist in preparation of definitive standards of competence for each allied health category	1 2 3 4 5 6

Column A Importance	Function	Column B Performance
	III. Conduct research	
1 2 3 4 5 6	1) Study the effects of certification upon lateral lattice and upward career mobility in a technologically dynamic environment	1 2 3 4 5 6
	2) Conduct research on the dynamics of allied health occupations:	
1 2 3 4 5 6	a) Longitudinal studies of allied health careers -- age, sex, qualifications, experience, job structure, employer type, ...	1 2 3 4 5 6
1 2 3 4 5 6	b) Methods for maintaining competence after initial certification	1 2 3 4 5 6
1 2 3 4 5 6	c) Problems involved in cross-qualification, cross-training, and cross-placement	1 2 3 4 5 6
	3) Conduct research on certification process	
1 2 3 4 5 6	a) Methodology of test construction and validation	1 2 3 4 5 6
1 2 3 4 5 6	b) Cost saving practices in certification procedures	1 2 3 4 5 6
	4) Conduct research on allied health manpower problems such as:	
1 2 3 4 5 6	a) Occupational supply imbalances	1 2 3 4 5 6
1 2 3 4 5 6	b) Geographic maldistributions	1 2 3 4 5 6
1 2 3 4 5 6	c) project future manpower supply and demand	1 2 3 4 5 6
1 2 3 4 5 6	d) Effective utilization of manpower qualifications	1 2 3 4 5 6
1 2 3 4 5 6	e) Incentives to more optimal geographic distribution of health personnel	1 2 3 4 5 6
1 2 3 4 5 6	5) Collect and analyze information regarding new technology affecting the occupational structure and certification standards for allied health personnel	1 2 3 4 5 6
1 2 3 4 5 6	6) Analyze the effect of specialized health care delivery units upon certification requirements	1 2 3 4 5 6
1 2 3 4 5 6	7) Study the interactions of certification and other forms of credentialing	1 2 3 4 5 6

Column A Importance	Function	Column B Performance
	IV. Collect and disseminate information	
	1) Compile regional and national data on current supply, demand, and salary levels for allied health personnel:	
1 2 3 4 5 6	a) by occupation	1 2 3 4 5 6
1 2 3 4 5 6	b) by level within occupation	1 2 3 4 5 6
1 2 3 4 5 6	c) by location	1 2 3 4 5 6
1 2 3 4 5 6	d) by type of employment situation	1 2 3 4 5 6
1 2 3 4 5 6	2) Maintain a data bank linked to other data banks	1 2 3 4 5 6
1 2 3 4 5 6	3) Serve as a clearinghouse for technological information releases	1 2 3 4 5 6
	V. Mediate or adjudicate interoccupational differences	
1 2 3 4 5 6	1) Serve as a forum for resolving differences among members pertaining to policy or procedural matters	1 2 3 4 5 6
1 2 3 4 5 6	2) Mediate differences arising from the need to certify new professions or subspecialties with cross-disciplinary characteristics	1 2 3 4 5 6
	VI. Encourage cooperation and joint activities	
1 2 3 4 5 6	1) Coordinate the development of joint examination programs	1 2 3 4 5 6
	2) Participate in coordinated recruiting programs for allied health manpower by providing information on:	
1 2 3 4 5 6	a) certification standards	1 2 3 4 5 6
1 2 3 4 5 6	b) occupation and specialty definitions	1 2 3 4 5 6
1 2 3 4 5 6	c) projected manpower data	1 2 3 4 5 6
1 2 3 4 5 6	3) Serve as a channel for joint public information programs (and advertising and media activity) in collaboration with related schools, professional societies and government agencies	1 2 3 4 5 6
1 2 3 4 5 6	4) Coordinate the identification of common blocks of job knowledge and skills relevant to certification	1 2 3 4 5 6

Column A Importance	Function	Column B Performance
	VII. Perform public relations and representation roles	
1 2 3 4 5 6	1) Serve as an organized interface for the certifying organizations on joint matters with the National Committee on Accrediting, Joint Committee on Accrediting of Hospitals, U.S. Health Resources Administration, U.S. Social Security Administration, Association of American Medical Colleges, Association of Schools of Allied Health Professions, and state licensure bodies.	1 2 3 4 5 6
1 2 3 4 5 6	2) Serve as a common communications arm to the various legislative and administrative government agencies which have an effect upon certification. Among the pertinent issues which are included in such a function are: (a) image creation for the public, showing allied health personnel as being worthy of the public's confidence; (b) representation of allied health manpower in considerations of the public issues; (c) recognition of the public interests in allied health competence, as reflected in certification, and translation into policy guidance for constituent members.	1 2 3 4 5 6
1 2 3 4 5 6	3) Recruit new member organizations.	1 2 3 4 5 6
	VIII. Provide common administrative services.	
	1) Establish or operate a clearinghouse for central qualification information on individuals certified, either as	
1 2 3 4 5 6	a) a service to individual registries, not as a competitor	1 2 3 4 5 6
1 2 3 4 5 6	b) as a consolidated replacement of current registries	1 2 3 4 5 6
1 2 3 4 5 6	2) Act as a central fund-raiser for certification programs, or as an advisor, notifying member organizations of the existence of funds and the best means of soliciting them	1 2 3 4 5 6
	3) Provide such day-to-day services of a fiscal-clerical nature. These functions may include centralized:	
1 2 3 4 5 6	a) office staffing	1 2 3 4 5 6
1 2 3 4 5 6	b) data processing	1 2 3 4 5 6

Column A Importance	Function	Column B Performance
1 2 3 4 5 6	c) projected manpower data	1 2 3 4 5 6
1 2 3 4 5 6	d) systems design and analysis	1 2 3 4 5 6
	4) Provide the organizational framework for services to member organizations in their programs for maintenance of competence of certified persons -- their continuing education and evaluation thereof. The Council could serve any individual organization or combination of them, as by occupational type; or all member organizations. These services may include:	
1 2 3 4 5 6	a) administer established programs for continuing education	1 2 3 4 5 6
1 2 3 4 5 6	b) analyze and identify specific needs in these programs	1 2 3 4 5 6
1 2 3 4 5 6	c) develop curriculum material	1 2 3 4 5 6
1 2 3 4 5 6	d) develop testing methods and materials	1 2 3 4 5 6
1 2 3 4 5 6	5) Develop and oversee common test administration services.	1 2 3 4 5 6

APPENDIX 4b

RANK ORDER OF PERCEIVED IMPORTANCE OF POSSIBLE FUNCTIONS

RANK	METHOD 1		METHOD 2		METHOD 3	
1	3.3.2		3.3.2		3.3.2	
2	3.2.2		3.2.2		3.3.1	
3	3.3.1		3.3.1		3.7	
4	1.2	*	1.2	*	1.2	*
5	1.3		1.3		3.2.2	
6	6.1		3.7		1.3	
7	5.2		6.1		5.2	
8	2.1		5.2		4.1.4	
9	3.7		3.5		4.1.1	
10	3.5		2.1		7.2	
11	4.1.1		4.1.1		4.1.2	T
12	7.2		7.2		4.1.3	T
13	4.1.2	T	4.1.4		6.1	
14	4.1.3	T	4.1.2	T	4.2	
15	1.1		4.1.3	T	3.5	
16	4.1.4		8.4.4	**	3.4.4	
17	4.2		4.2		6.4	
18	6.4		6.3	*	3.2.3	
19	7.1		1.1		7.1	
20	5.1		6.4		1.1	
21	6.3	*	2.2		2.1	
22	3.1		7.1		3.4.1	
23	2.2		3.4.4		8.3.2	T
24	3.4.1		3.6		6.3	* T
25	3.4.4		5.1		8.3.1	
26	8.4.4	**	3.4.1		3.6	
27	3.4.2		3.1		8.4.4	**
28	6.2.1		3.4.2		3.4.2	T
29	3.4.5		8.5	**	8.3.4	T
30	8.3.2		8.3.2		5.1	
31	8.3.4		3.2.3		4.3	
32	4.3		8.3.1		2.2	
33	8.3.1		8.4.2	**	6.2.1	
34	3.2.3		6.2.1		3.4.3	T
35	3.4.3		8.3.4		8.5	** T
36	6.2.2		8.4.1	**	3.2.1	
37	8.2	*	4.3		3.1	
38	6.2.3		8.2	*	8.1.1	T
39	8.5	**	3.4.5		8.2	* T
40	3.2.1		3.4.3		8.4.2	**
41	8.1.1		6.2.2		3.4.5	
42	8.4.2	**	6.2.3		8.4.1	**
43	8.4.1	**	3.2.1		6.2.3	
44	7.3		8.1.1		6.2.2	
45	3.6		8.4.3	**	8.1.2	
46	8.1.2		7.3		8.4.3	**
47	2.3		8.3.3	*	8.3.3	* T
48	8.3.3	*	8.1.2		7.3	T
49	8.4.3	**	2.3		2.3	

Notes:
* 20 responses
** 19 responses
T tied in rank

APPENDIX 4c

DERIVATION OF RANKINGS

Method 1: The number of respondents (N) voting for each level of importance X, one through six, are tabulated by N_x as follows for each function:

$$N_1(1)+N_2(2)+N_3(3)+N_4(4)+N_5(5)+N_6(6)$$

With twenty-one respondents, the scores can range from minimum importance, i.e., all vote one, of 21 to maximum importance, i.e., all vote six, of 126.

Method 2: The number of respondents (N) voting for each level of importance (X), one through six, are tabulated by N_x as follows for each function:

$$N_1(-3)+N_2(-2)+N_3(-1)+N_4(+1)+N_5(+2)+N_6(+3)$$

With twenty-one respondents, the scores can range from minimum importance of -63 to maximum importance of +63.

Method 3: The sum of N_x for each function for $x>3$. The scores can range from none to twenty-one voting for importances of four, five, or six.

Ties are broken for identical scores in different functions by examining the number of "six" votes, with the greater receiving the higher ranking. If tied at six, the number of "five" votes; and last, if tied at five, the number of "four" votes. If tied beyond that point, tied functions are left as is.

Appendix 5

A STATEMENT OF A POSSIBLE FUTURE OF THE HEALTH CARE DELIVERY SYSTEM

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Feasibility of a national system for certification of allied health manpower depends upon several factors that are in the future. Analysis requires a picture of the more probable future characteristics of the health care delivery system. It is most fortunate that the proceedings of the HEW conference on Technology and Health Care Systems in the 1980's became available as a basis for describing a probable future scenario within which to analyze the interaction of certification and the health care delivery system.

The preparation of forecasts of sociological and technological trends can be based upon the considered judgment of individuals who have an operational as well as a theoretical grasp of the nature of the system and an ability to sense the dynamic movement of the "earth" beneath their feet. Such a collection of views is presented in the twenty-three papers in the conference proceedings. We have, therefore, constructed this summary forecast from the extensive observations and insights of the authors of the collected papers. This forecast should be construed as applying to health care delivery in general; very little in this compendium deals directly with the future of allied health manpower. These assessments of the future do, however, have a great deal to say about directions and trends that allied health can hardly ignore. They present issues that must be considered and planned for if a national system for certification is to be truly productive in the long run.

The preponderance of the articles deal with technology -- its use, costs, benefits, productivity, and goals. There seems to be basic agreement that one problem to be faced is that of channeling growth along "beneficial" or "acceptable" lines. Odin Anderson discusses the difficulties he sees in the proliferation of technology in terms of misguided ideals and goals. The basic problem is economic and he believes that if we throw resources primarily into prolonging life of the terminally ill, (as he predicts) other benefits of medical technology -- prevention, good patient management for intractable diseases, and rehabilitation -- will be ignored.[1] Anderson professes to have no solution to the problem but concludes that

> A service that is all-inclusive, high in quality, and available to everybody is impossible; a minimum and professionally acceptable standard for everybody is not.[1]

Other authors also address technology. M. Alfred Haynes[2] believes it has too strong an influence on the health delivery system, creating an atmosphere in which health care providers clamor for all the latest innovations without considering the broad view of their worth or overall usefulness. Anne Somers notes, "There is a dynamic force inherent in modern (medical) technology that leads to economic growth, higher costs, and increasingly centralized financing and administrative control, ending, almost inevitably, with government control."[3] There is an implication in her article that higher costs equated with increasingly sophisticated, specialized equipment and procedures may be equated with proliferating medical and paramedical subspecialties as well. Inherent in such an implication is a requirement of close scrutiny for matching costs and benefits; "The cost of giving a former President six added months of life after a series of severe heart attacks is an amount far beyond the present capacity of our nation should it wish to offer equal treatment to other cardiac sufferers."[4]

Cost effectiveness of new technology is a recurrent theme. Articles by Walter McNerney[5] and Lester Breslow[6] emphasize the proliferation of technology to the detriment of the consumer. The former points up some instances where technology has been developed entirely without consideration of any reasonable benefits derived while the latter mentions it in terms of creating heightened expectations for the consumer that sometimes cannot be met by the medical community as a whole. It is implied these phenomena will multiply unless proper attention is given to them by the entire medical community. In their preoccupation with cost-effectiveness, however, the articles do not consider two corollaries of emerging high-cost technology. In some instances the government or the public may be willing to absorb the higher costs, as is the case with Medicaid's recent decision to cover kidney dialysis. Also, no one explores the history of changing costs caused by simplification in high technology areas. Experience has been that the passage of time brings reductions in the complexity of equipment and the development of means of using technicians in the place of full professional scientists and engineers as operators. As to the latter point, only Jane Newitt[7] sees costs as controllable and therefore not a factor for consideration in future systems. Cost-benefit analysis of technology's proliferation is a predominant subject in the report; though the opinion of experts is divided on the effects of this proliferation, the subject will continue to be raised, and the implications for health manpower certification are bound to be great.

Another major concern of the report is the "widening concept of sickness and health care"[7] and a concomitant redefinition of many medical and institutional goals. Mrs. Newitt speaks of the need to identify reasonable goals, and feasible means of attaining them, in the health care delivery system. She emphasizes the greatly heightened expectations of the public for more and different kinds of treatment and counseling, in quantity, quality, and perhaps most significant, personalization. She predicts there will be a continuing trend toward equating social and medical problems and thus making health care part of an overall approach to a health maintenance concept that might, for example, correlate slum conditions and health problems such as malnutrition highly incident in such areas. She discerns a movement toward identification of certain population segments as "sick", with subsequent implications for increased demand for different types of treatment. "An energetic minority of doctors, most conspicuously psychiatrists and poverty-area physicians, entertains the theory that many symptoms of illness represent the response of a basically healthy organism to a sick environment."[7]

Several authors address the public's heightened expectations from the medical community.

> There are those who feel that a major problem with our health care system is that it is too strongly influenced by the growth of a technology and not sufficiently responsive to social needs.... Health providers must in the coming years make greater room for involvement on the part of consumers. It is not enough for the health care system to be controlled by what the provider wants, it must also reflect what the consumer needs.[2]

It is suggested that the predominance of concern with what the provider wants has led to an increasing depersonalization of the health care delivery system and a widening gap in communication between doctor and patient. While this change in the traditional structure may be necessary for many obvious reasons, many patients evidently feel slighted at being handled by allied health personnel and do not understand the need for, and efficiency of, these new delegations of authority. "Everyone laments the loss of the traditional doctor-patient relationship, even those who never had it. Everyone deplores the increasing depersonalization of care, even those who never knew good personal care."[3] R. J. Glaser echoes this sentiment:

> As the health care team concept spreads, the patient often will not see a physician. If he is to accept the concept, he must understand why it potentially affords him as good or better care in a more efficient way and at lower cost. Similarly, patients must be taught the value of such technological devices as those employed in multiphasic screening. Such understanding includes appreciation of what technology does and does not offer. Only effective public education can enable the public to use whatever we have to offer him in health care, and only education can protect the public from unrealistic expectations and from charlatans....[8]

As associated concern is the future control and administration of health care. Howard Freeman projects changes from the present and traditional system of physician control.

> While there is little need for the individual medical practitioner to panic and seek another vocation, it is pretty safe to suggest that physicians gradually will lose their high status and exorbitant incomes and the medical care field, its high degree of autonomy. The long range future will see health services become an integral part of a broader human services system, with a peer, not a dominant, role for persons identified with medical care in shaping the workings of the growing consortium.[9]

He further says that these changes will include the gradual loss of political and policy making control by persons trained in health services in activities that affect them. The trend toward allied health personnel taking over broad areas of direct care will continue. Community control will become a reality with respect to many mass delivery settings and will become more institutionalized over time. Mr. Freeman believes that medical schools, because of social equality problems, may be forced to go to an open enrollment policy. This may filter down into the allied health professions and create increased pressures for lowering or dropping of various requirements, especially academic credentials. Accompanying this may be an increased emphasis on qualifications based upon experience and training. Gerald Dorman is one of several authors who see the future of allied health training including preparation for assisting in the administration of health care. Change in the present predominant position of the physician may include introduction of a new system of geographical allocation of all types of manpower. Rashi Fein says, "I do not consider it likely that our attitudes vis-a-vis geographic mobility will change, and, therefore, project an incentive rather than control system on locational decisions."[10] Victor Fuchs sees this in a different light: "There are those in the health field who recognize that we cannot satisfy all wants but who seem to believe that health is more important than all other goals and therefore believe that questions of scarcity and allocation are not applicable in this area."[11] Fuchs discusses the failure to give due regard to efficiency for public interest in administration of health care, suggesting that such factors should be injected into the doctor - allied health practitioner relationship, a relationship which at present has little outside supervision: "Codes of professional ethics which arise out of the principal - agent relationship and afford protection to the principals, can also serve as a cloak for monopoly by the agent."[11] Several other articles make reference to a future need for more consumer participation in health care delivery administration.

Some authors question the social desirability of the present goals and emphasis of the system. A major issue in this context involves health maintenance or preventive medicine as opposed to the present emphasis on treatment and research of disease after the fact. Somers suggests that research and technology advancements may be misguided to the extent that more emphasis should be placed on the causes of illness and death. Dr. George James approached the subject in detail:

> The lack of available definitive medical care for the major causes of death is well known. The coronary care unit that has attracted enormous attention throughout the country is credited with making the crucial difference in saving only one-sixth of the lives of (its) patients....[4]

James points out a number of inconsistencies in public policy on medical research funding; his argument summarized is: "Perhaps the most efficient, the most definitive, and eventually the least costly control of disease would be through prevention."[4] When such considerations as the fifteen year lag between the conclusive linking of cigarettes and cancer and the Surgeon General's report, and weak attempts to publicize the correlation between many diseases and unsuitable diets, are viewed in the light of the report's heavy emphasis on cost-effectiveness, James' is a crucial statement.

Several new systems concepts for health care delivery are offered, predicated upon the need for cost-effectiveness, reasonable and attainable goals, and proper identification of the illusive "public interest." Victor Fuchs points out two fallacies obstructing clear thinking in the creation of new systems: the belief that resources are no longer scare; and the belief that health is the most important goal, to the exclusion of all others. John Walsh offers several suggestions that may be applicable to allied health manpower in the future. His is a systems approach, and among his suggestions are: peer review procedures to ensure quality of care; consumer participation in determination of the adequacy, accessibility; and overall satisfactoriness of health services; and financial incentives promoting efficiency, economy, and effectiveness, the latter to include improvement in the quality of care provided.[12] A large section of Gerald Dorman's article is devoted to creating a systems approach in all phases of medical work. Sidney Garfield's article begins with a disturbing, and not atypical statement:

> This country is about to witness an extraordinary event that challenges the imagination. Our scarce and already overtaxed medical care resources are soon to be made available to all who want them by the simple expedient of making them free. Though this violates the basic laws of economics, we are to assume it will work, even though it was tried on a smaller scale with Medicare and Medicaid and failed. To top off this amazing feat, this legislative magic will be performed at no extra cost to the country by merely passing on the costs through capitation to the doctors and hospitals providing the services.[3]

This statement prefaces Garfield's fears about the inadequacies of the present market system of providing health care, and leads to his recommendation for new modes of health care delivery. He criticises the existing system's ability to cope with the combined demand of those who are actually sick, and those who think they are. The presently inelastic system is overloaded causing a severe backup of unavailable services. The large number of "think they're sick" people who usurp physician time must be dealt with in different ways so they do not act as a barrier to the entry of sick people. Garfield suggests control of entry to the system by health testing. Reduced to its basics, this new system makes extensive use of both computer technology and paramedical personnel. Sick care, with its high level decisions in diagnosis and therapy, would clearly remain the province of the physician until he delegates authority. But he would become the manager of patient care in practice as well as theory rather than, as at present, being directly involved in all phases of the system. The added responsibilities for allied health personnel and their certifying organizations become obvious if this type of system is to be implemented.

A futuristic model of ultimate uses of allied health personnel, based on an analog of the NASA health-delivery-to-astronauts concept, is given by Charles Berry.[14] This is the sort of twenty year and beyond, visionary thinking that the Council might engage in and plan for if it is to remain effective for the long run.

In contemplating development of future systems for health care delivery, it should be kept in mind that the cost- and benefit-effectiveness of each type of system under scrutiny -- private hospitals, group practices, community health maintenance organizations, or others that have been proposed -- must be evaluated in the light of the goals for that system. For example, will Federally subsidized HMOs provide care to the poor, one of the intended goals, or reach only those who probably need them least? This is the kind of "devil's advocate" thinking that must be undertaken and vigorously encouraged.

The diverse views summarized in this scenario are not definitive. They sketch a future as a set of trends. The result is not a statement of "the future" but of a "more probable future." This future includes large spaces to be filled by the resolution of ethical and moral considerations. Some of the features are based on social value judgments on which there is no consensus today. But, in the synthesis of these diverse views into a single statement we have stated a set of premises on which the type, rate and direction of change can be detected and its consequences projected. A system which seeks to increase the assurance of quality of allied health personnel engaged in this dynamic health care process must be aware of projected changes in its environment and have mechanisms by which it can adapt rapidly to change and growth.

The accommodation to technology in the recent past presages the adjustments that will be required in the years agead. Certification is and must be responsive to shifts in society's goals and priorities -- social values that in turn are influenced by and react to technological change. Certification is required to adapt to the "state of the art" in medicine and dentistry which is continually modified by technology. Moreover, certification operates in the setting of the health care delivery system, which is structured by technology along with political, economic and social forces. Changes in society's values, in the state of the art, and the delivery system inevitably affect health manpower.

Technology produces an explosion of expectations that increase the demand for health services and compels changes in the delivery system. The debate in the political sector about national health insurance is evidence of the rising expectations with regard to health care in the American public. New patterns of care and new types of institutions, as the health maintenance programs of HMOs, call for new concepts in health personnel. These concepts must be transmitted in educational institutions and reinforced by the credentialing process. Thus, an adaptive system of certification is necessary.

Technology enlarges the scope of medical and dental practice, delivered in increasingly institutionalized and bureaucratized settings, using an expanding variety of health care personnel to provide services formerly not only unavailable but unimaginable. The interdisciplinary approach to health care has given rise to the health team in direct patient care. Certification in collaboration with other credentialing systems and with provider institutions must be responsive to the interrelationships of different occupations in the health care setting and foster, not hinder, the optimum functioning of interdependent health personnel.

Technology begets specialization. New occupations and changes in existing occupations through increased specialization are probably the most direct manpower effect of technological advances. Certification systems as well as other credentialing processes are continuously faced, therefore, with defining new roles, setting standards of competence, and assuring quality control. A system whose objective is to assure the quality of allied health personnel in a dynamic health care process must be aware of projected changes in its environment and have mechanisms by which it can adapt rapidly to change and growth.

FOOTNOTES

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Appendix 6

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